

2018-19



JAIPUR NATIONAL UNIVERSITY

Approved under Section 2(f) and Clause 12 (B) of the UGC Act of 1956 and Rules of 1974

PROSPECTUS

The Seedling Group of Educational Institutions
Approved by UGC, Accredited by NAAC





Chairperson, Mahima Shiksha Samiti

'With a dream I closed my eyes, with a vision I rose; that I wish to travel the road yet unknown'.

Jaipur National University is the result of such a holistic vision encompassing excellence in education at all levels from Pre-Primary to University. A holistic vision aims to facilitate intellectual stimulation, and to generate, maintain and disseminate knowledge.

25 years since its inception, the Seedling Group of Institutions has achieved its vision after the establishment of Jaipur National University in 2007. Students at the University are empowered with skills and knowledge to meet challenges in a competitive work environment. Excellence is synergized through the provision of world-class facilities, faculty and infrastructure giving the students that cutting edge, which is essential for success in today's global environment.

Courses offered at the University are innovative and pragmatic, and include disciplines like Engineering, Management, Mass Media & Animation, Information Technology, Computer Science, Law, Pharmacy, Hotel Management, Life Sciences, Education, Social Sciences, Languages, and Basic Sciences, etc. Students are thus offered a wide access to opportunities in higher education. Several courses are also offered through Distance Mode. International collaborations ensure hands on exposure to global trends which have an impact on higher education.

At JNU we are committed to a high degree of professionalism. We welcome students who aspire to excel in studies to become true professionals and worthy citizens of our great nation.

**Mrs. Mohini Bakshi
(Chairperson)**



From the desk of Chancellor/Chairman

"A body of determined spirits fired by an unquenchable faith in their mission can alter the course of history."

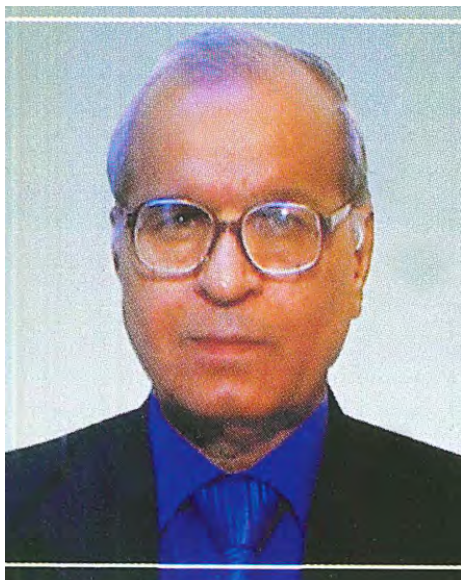
Jaipur National University aims to create a world of knowledge and learning with a difference. It strives at excellence to provide pragmatic and useful education. The University is quite sensitive and concerned to impart education to the youth of 21st century. We are going to reshape the future of our great country. A holistic and interrogative mind alone can make the youth competitive and globally acceptable. Education assaults strings of superstitions and taken-for-granted beliefs, and generates a critical and reflective thinking among men and women. Jaipur National University is committed to such a philosophy and intellectual empowerment of young men and women.

Keeping in view our holistic goal, we have created Schools and Departments, incorporating several disciplines and specializations. We have job-oriented programmes of study and research, which include Animation, Hospitality, Engineering, Management, Pharmacy, Life Sciences, Education, Law, Media, Computer and Systems Sciences, Humanities and Social Sciences. Our effort is to equip the students in these domains of theory and praxis. A semblance of the two alone can ensure a balanced intellectual development of a student.

The principle of limit does not apply to education. It is not only universal; it is also a desirable means of enlightenment and liberation. We have taken into consideration such a philosophy of education while formulating our programmes of study and in the implementation of the same through classroom teaching, seminars and discussions, and by way of state-of-art infrastructure and teaching aids.

We welcome you to the Jaipur National University, a center of excellence, and a unique place for knowledge and learning.

Dr. Sandeep Bakshi
(Chancellor/Chairman)



From the desk of Pro-Chancellor/Pro-Chairman

"If progress is to be steady we must have long term guides extending far ahead."

As one of the best universities of India, Jaipur National University, Jaipur (JNU) has an impact not only at local and national levels but at international level too, with the collaborations and associations of many renowned national/foreign institutions. Jaipur National University is recognized as a socially-inclusive institution of higher education in various professional and technical sectors. Since its inception in 2007, the University has been consistently attracting students from all parts of India and abroad.

We endeavour to produce thinking minds with a bright vision of the future driven by a mission to make a difference in the workplace, through deep sense of dedication, integrity and tenacity. With around 10000 students and over 400 faculty members – 16 schools are striving to accomplish the noble Vision and Mission of the University. By working closely with our students' community, we are indeed proud to play a leadership role in stimulating innovative spirits, fostering inquisitiveness and enhancing independent thinking both in our students and faculty members.

We get motivation and inspiration from the Government, Society, and Industries along with our students' community to proceed towards rapid socio-economic transformation in order to establish the image of a "student-centred institution". Besides, the University also organizes various co-curricular activities to provide a global platform to the students for their overall development. We strongly value our collaborations with industries, professional associations and institutions of higher education in India and abroad.

I congratulate the students on their new venture through Jaipur National University as it offers a unique opportunity to the students to become a part of the learning process in an open and advanced academic environment.

Best Wishes!!

Professor K.L. Sharma
(Pro-Chancellor/Pro-Chairman)



From the desk of Vice-Chancellor

Based on the efforts of the Seedling Group of Institutions, namely, Seedling Academy of Design, Technology and Management (SADTM) and Seedling Institute of Integrated, Learning and Advanced Studies (SIILAS), for imparting professional and technical education, the two institutions were transformed into Jaipur National University by the Government of Rajasthan in October 2007. The University has achieved excellence and high standards of professional education, and offers programmes of study and research at Bachelor, Master and Doctoral levels. A high academic reputation, competent faculty, excellent infrastructure and panoramic surroundings, make Jaipur National University as an ideal place for study. Whatever programme you join, your experience would be unique. If you are looking for a platform to develop and attain multifaceted skill-sets, in-depth knowledge, and realization of your dream, then Jaipur National

University is the ideal destination for you.

The University offers comprehensive and well-integrated facilities, including academic programmes and extra-curricular opportunities, auditoria and beautifully landscaped surroundings. The University has also created excellent facilities, like libraries, avenues for sports and games and cultural activities, which would pave a way for a well-rounded personality of a student. Social and cultural events and activities held at the Campus encourage harmonious interaction among the students.

We have an outstanding faculty and excellent supporting staff. Some of our faculty members are recognized nationally and internationally, based on their published works, and the honours, which they have received in recognition of their scholarship.

As a student, at the Jaipur National University, you will have invaluable resources to your advantage. We strive to provide you quality education that will lead to a successful career for you. Our caring and experienced faculty and staff are here for your academic and personal development and progress.

I wish you a great success here, and I hope your stay will prove a milestone for shaping up your future.

Professor H.N. Verma
(Vice-Chancellor/President)



From Executive Director

Education would fail ignominiously in its objective, if it manufactured only a robot and called him an economic man accenting the adjective 'economic' and forgetting the substantive 'man'. A university cannot afford to ignore the cultural aspects of education, whatever studies it specializes in. Science is a means, not an end, whereas culture is an end in itself. Even though you may ultimately become a computer programmer, a scientist, a doctor, or an engineer, a teacher or a lawyer, you must, while in college, absorb fundamental values, which will make you, a man true to yourself. You will have trials and tribulations; your heart will fail you at times; you will then need the spiritual strength which true culture alone can give. We aim to achieve a holistic vision that never discounts the past, but at the same time embraces the future with unwavering confidence in the ability to shape it and

harness its potentialities.

Located at the cutting edge of knowledge, Jaipur National University has not just kept pace with the changing world, but it has been the pioneering spirit behind many innovations in the field of education. The striving is to imbue the teaching/learning process with a unique blend of intellectual rigour and aesthetic and ethical engagement. JNU is committed to nurturing graduates who are equipped to be world citizens, who not only take pride in their culture and heritage but also have a cosmopolitan understanding of the world today and a sensibility that celebrates diversity in all its joyous vibrancy. The students of Jaipur National University understand that with the power of knowledge, comes the responsibility to translate it into creative citizenship. They recognize challenges as opportunities. The University students are empowered with professional competence, an ability to assume positions of leadership with ease and shatter inhibitory glass ceilings. Education at Jaipur National University enables students to reconcile excellence with humanity, to celebrate diversity and redefine notions of success. The emphasis is on liberating and not a domesticating pedagogy.

I hope your future pathway with one of our programmes would fulfill your needs. We look forward to welcome you as a student of the University.

Dr. Preeti Bakshi
(Executive Director)

About the University

Jaipur National University, Jaipur, a Private self-financed University, sponsored by Mahima Shiksha Samiti, came into existence on October 22, 2007, through an Ordinance of the Government of Rajasthan. The University is one of the many institutions of the Seedling Group of educational institutions under the aegis of the Mahima Shiksha Samiti.

The University received mandatory approvals and recognitions for its programmes from the National Regulatory Bodies, namely, UGC, AICTE, PCI, NCTE, BCI and Nursing Council of India. The School of Distance Education and Learning of the University has also been recognised and approved by the Joint Committee of the UGC-AICTE-DEC.

Furthermore, the University has earned the trust and goodwill from the student fraternity, parents, public and the concerned agencies for its excellence in teaching and emphasis on high standards of research work.

In a short span of seven years, Jaipur National University has carved a niche for itself in the country for its commitment to providing quality education and offering a conducive learning environment. The University is becoming a preferred choice for professional and technical education, as well as for lovers of quality academic pursuits.

The University aims to meet the demands and challenges of acquiring knowledge and learning of life –skills, with a difference. Academic flexibility is achieved through interdisciplinary teaching and research.

Extensive studies, semester system, regular evaluation, advisory system, functional research and interrelated degree programmes are its salient features.

Keeping in view the philanthropic orientation of the Sponsoring Body and the Policies of the State, the University is fulfilling its social responsibility by awarding Scholarship and freeships. The university is committed to providing quality education for the development of the students, thereby contributing to the progress of the State and Society at large.

Vision

To promote and impart quality professionals and bring about technical education and holistic transformation of students to make them globally competent in this complex and challenging world.

Mission

Emphasis on student centric learning to inspire critical thinking, personal growth and lifelong passion for learning.

Commitment to the highest standards of academic rigour and vitality. Serving social, cultural and economic needs of the community & the society.

Location of the University

Jaipur National University is located in the capital of Rajasthan, Jaipur a well-known tourist destination for both Indians and foreigners. Its palaces, forts, gardens and museums are architectural marvels. Jaipur is known for its art and craft and gems & jewellery industry throughout the world.

The University Campus is aesthetically designed covering an area of more than 120 acres. With the Aravali Hills on one side and the sprawling green fields on the other, Jaipur National University presents a perfect panorama of the vision of a University given by Gurudev Tagore.

Jaipur is fast emerging as a hub of higher professional education in India on the pattern of Pune, Bengaluru and Hyderabad. The University is situated close to the city and the airport. One can reach the University from the main Railway Station and Central Bus Stand within half an hour.

The proximity of Jaipur to Delhi is an added advantage. The National Super-Express Highway No. 8 has reduced the distance between both the cities to four hours. Besides extensive road connectivity, Jaipur is easily approachable by Rail and Air from all major cities of India, including Mumbai, Ahmedabad, Delhi, Kolkata, Bengaluru and Hyderabad.



School of Engineering and Technology

The School of Engineering & Technology is well equipped to educate and train students in different Engineering Programmes.

Engineering Programmes

UG Programmes

School of Engineering & Technology

B.Tech (Electrical Engineering)

B.Tech. (Mechanical Engineering)

B.Tech. (Electronics & Communication Engineering)

B.Tech (Civil Engineering)

B.Tech. (Biotechnology)

B.Tech. (Chemical Engineering)

B.Tech (Computer Science Engineering)

B.Tech. (Food Technology)

B.Tech (Biomedical Engineering)

B.Tech + MBA (Dual degree)

PG Programmes

M.Tech. CSP (Communication and Signal Processing)

M.Tech. EES (Embedded System)

M.Tech. PSE (Power System Engineering)

M.Tech. CSE (Control System Engineering)

M.Tech IECM (Infrastructure & Construction Management)

M.Tech WRE (Water Resource Engineering)

M.Tech –IPE (Industrial & Production Engineering)

Ph.D. (Electronics & Communication Engineering)



Electrical Engineering

Electrical Engineering focuses on the study of generation, transmission, storage and utilization of electrical energy. Some of its important domains are Control Engineering with emphasis on accuracy in controlling equipment in electrical and chemical industries as well as residential and commercial multiplexes.

Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Electrical Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET + PI
B.Tech Electrical Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET + PI
M. Tech in Power System Engineering	2 Years	B.Tech with min. 55%	ET + PI
M.Tech in Control System Engineering	2 Years	B.Tech with min. 55%	ET + PI

Courses offered in B.Tech Electrical Engineering (BTÉE)

Semester	Course Title
I	Engineering Physics -I
	Engineering Chemistry -I
	Engineering Mathematics -I
	Fundamentals of Electrical Science
	Introduction to IT and Computer Programming
	English I
	Environmental Studies
	Engineering Physics Lab -I
	Engineering Chemistry Lab -I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab -I
	General Proficiency

Semester		Course Title	
II		Engineering Physics –II	
		Engineering Chemistry – II	
		Engineering Mathematics -II	
		Engineering Mechanics	
		Programming for Problem Solving	
		English – II	
		Engineering Physics Lab – II	
		Engineering Chemistry Lab-II	
		Computer programming Lab	
		Workshop Manufacturing Practices Lab	
		Communication Skills Lab – II	
		General Proficiency	
	III		Electrical Circuit Analysis
			Analog Electronics
		Electrical Machine-I	
		Electrical Measurements & Measuring Instruments	
		Data Structures and Algorithms	
		Mathematics – III (Probability and Statistics)	
		Analog Electronics Laboratory	
		Electrical Machines Laboratory - I	
		Electrical Measurement Lab	
		Professional Practices-I Lab	
		Computer Programming Lab	
		General Proficiency*	
IV			Digital Electronics
			Electrical Machine-II
		Power Electronics -I	
		Signals and System	
		Electrical Material	
		Indian Constitution*	
		Digital Electronics Laboratory	
		Electrical Machines Laboratory - II	
		Power Electronics Laboratory-I	
		Circuit Analysis Lab	
		Professional Practices-III Lab	
		General Proficiency*	

Semester		Course Title
V		Power Electronics -II
		Control Systems
		Microprocessors
		Electrical Machine Design
		Renewable Energy Resources
		Transmission and Distribution of Electrical Power
		Power Plant Engineering
		Data Base Management System
		Entrepreneurship Development
		Power Electronics Lab-II
		Computer Based Electrical Machine Design Laboratory
		Control Systems Laboratory
		Microprocessors Laboratory
		Professional Practices –III
VI		General Proficiency*
		Power Systems -I
		Electrical Traction System
		Electromagnetic Field Theory
		Digital Signal Processing
		Electrical Energy Conservation and Auditing
		Power System Protection
		Control Systems Design
		Line Commutated and Active Rectifiers
		High Voltage Engineering
		Analog and Digital Communication
		Power System Dynamics & Control
		Professional Ethics & Disaster Management
		Power Systems Laboratory -I
		Python Laboratory
		Project Stage-I
		Power System Protection Lab
	VII	
		HVDC Transmission System
		Power Systems - II
		Electric Drives
		Computer Architecture
		Industrial Electrical Systems
		Power Generation & Control
	Wind and Solar Energy Systems	

Semester		Course Title
VII		Electrical and Hybrid Vehicles
		Artificial Intelligence Techniques
		Power Quality and FACTS
		Big Data Analysis
		Power System and High Voltage Lab
		Power Systems Laboratory - II
		Project Stage-II
		Professional Practices-IV Lab
		General Proficiency*
VIII		Internship/Entrepreneurship Project Work Presentation
		EmergentTechnology/Academics Based Seminar
		General Proficiency*

Courses offered in M.Tech Power System Engineering (MTPSE)

Semester		Course Title
I		Advance Power System Analysis
		Power System Stability
		Electrical Distribution System
		Advanced Power Electronics
		Renewable Power Generation Sources
		Industrial Control Electronics
		Writing Skills And Presentation-I
		Power Electronics Simulation Lab
II		Power System Optimization & Control
		Advanced Power System Protection
		Transient Over Voltages in Power System
		Advanced Distribution Systems
		Power Quality
		System Theory
		Restructured Power System
		Power Electronic Drives
III		Writing Skills & Presentation-II
		Control System Simulation Lab
		EHV Ac/Dc Transmission & Facts
		Smart Grid Technologies & Applications
IV	Power System Simulation Lab	
	Dissertation Part- I	
	Dissertation Part II	

Courses offered in M.Tech Control System Engineering (MTCSE)

Semester		Course Title
I		Basic Control System
		Systems Engineering
		Digital Control Systems
		Real Time Instrumentation Techniques
		Advance Power Electronics
		Linear System Theory
		Robot Dynamics & Control
		Writing Skills & Presentation-I
		Simulation Lab
II		Control Devices
		Modern Control System
		Non-Linear And Adaptive Control
		Optimal And Robust Control
		Multi-Variable Control System
		Measurement System & Error Analysis
		Power System Dynamics & Control I
		Writing Skills & Presentation-II
		Control System Lab
III		Control Systems Design
		Drives and control
		Intelligent Control
		Digital Signal Processing
		Microprocessor Based Control System
		Advance Control System Lab
		Dissertation Part –I
IV		Dissertation Part–II



Mechanical Engineering

Mechanical engineering is an engineering branch that combines engineering physics and mathematics principles with materials science, to design, analyze, manufacture, and maintain mechanical systems. It is one of the oldest and broadest of the engineering branches.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Mechanical Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Mechanical Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
M.Tech Industrial & Production Engineering	2 Years	B.Tech with min. 55 % in relevant Stream	ET+PI



Courses offered in B.Tech Mechanical Engineering

Semester	Course Title
I	Engineering Physics –I
	Engineering Chemistry –I
	Engineering Mathematics –I
	Fundamentals of Electrical Science
	Introduction to IT and Computer Programming
	English I
	Environmental Studies
	Engineering Physics Lab –I
	Engineering Chemistry Lab –I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab –I
	General Proficiency
II	Engineering Physics –II
	Engineering Chemistry – II
	Engineering Mathematics –II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General Proficiency
	Mechanics of Solids
	Material Science & Engg.
III	Engg. Thermodynamics
	Production Engineering-I
	Automobile Engineering
	Mathematics-III
	Material Science & Material Testing Lab
	Production Practice-I
	Automobile Engineering Lab
	Mechanical Engineering Drawing
	Environmental Science
	General Proficiency

Semester	Course Title
IV	Kinematics of Machines
	Fluid Mechanics & Machines
	Production Engineering-II
	Design of M/c Elements – I
	I.C. Engines
	Industrial Engineering & Management
	Kinematics of Machines Lab
	Fluid Mechanics lab.
	Production Practice-II
	M/c Design Sessional –I
	I.C Engine lab
	General Proficiency
V	Dynamics of Machines
	Design of Machine Elements-II
	Measurement & Metrology
	Turbomachines
	Computer Aided Machine Drawing
	Enterprenureship
	Dynamics of Machine Lab
	Machine Design Sessional-II
	Measurement & Metrology Lab
	Computer Aided Machine Drawing
	General Proficiency
VI	Heat transfer
	Newer Machining Methods
	Vibration Engineering
	Power Plant Engineering
	Mechatronics
	Energy & Environment
	Heat Transfer lab
	Vibration Engineering Lab
	Mechatronics Lab
	Mini Project
	General Proficiency

Semester	Course Title
VII	Refrigeration & Air Conditioning
	Computer Integrated Manufacturing
	Operations Management
	Finite Element Methods
	Product development &Launching
	Operations Technique
	Thermal Engg. Lab-II
	CAM Lab
	FEM Lab
	Seminar
	Major project Lab
	General Proficiency
VIII	Internship /Entrepreneureship Project Work Presentation
	Emergent Technology/Academics Based Seminar
	Discipline & Extra Curicullar Activities

Courses offered in M.Tech Industrial & Production Engineering (MT-IPE)

Semester	Course Title
I	Advanced NumericalMethods and Applied Statistics
	Metal Forming
	Metrology
	Industrial Engineering Systems
	Value Engineering
	Project Management
	Total Quality Management
	Advance Manufacturing Lab
II	Advanced Optimization Techniques
	Advanced Computer Integrated Manufacturing System
	Machine Tool Design
	Supply Chain Management
	Human Resource Development & Industrial Relations.
	Precision Engineering
	CAM & CAD Lab
III	Micro Electrical and Mechanical Systems (MEMS)
	Nanotechnology
	Rapid Prototyping
	Materials Management
	Industrial Visit & Seminar
	Dissertation Part-I
IV	Dissertation Part-II

Electronics and Communication Engineering

Electronics and Communication Engineering is related to designing, development, testing and supervision of electronic devices & products.

The objective of the M.Tech. (Embedded System) is to provide in depth knowledge in various areas of Embedded System and to promote research and innovation. The syllabus has been designed to enable rigorous analysis in Embedded System.

The objective of the M. Tech programme in Communication and Signal processing is to provide in depth knowledge in electronics engineering and to promote innovation. The syllabus has been designed to enable rigorous analysis in signal process electronic devices and mathematical model

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Electronics and Communication Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Electronics and Communication Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
M.Tech Communication and signal Processing	2 Years	B.Tech with min. 55%	ET+PI
M.Tech Embedded System	2 Years	B.Tech with min. 55%	ET+PI
Ph.D in Electronics and Communication Engineering	Min. 3 Years	Min 55 % aggregate in M.Tech/M.E./M.Sc Electronics/M.Sc Physics with Electronics	ET+PI



Courses offered in B.Tech Electronics and Communication Engineering (BTEEC)

Semester	Course Title
I	Engineering Physics — I
	Engineering Chemistry — I
	Engineering Mathematics — I
	Fundamentals of Electricals Science
	Introduction to IT and computer programming
	English —I
	Environmental Studies
	Engineering Physics Lab —I
	Engineering Chemistry Lab —I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab —I
	General proficiency
II	Engineering Physics –II
	Engineering Chemistry – II
	Engineering Mathematics –II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General proficiency
	Electronic Devices
	Digital System Design
III	Signals & Systems
	Network Theory
	Data Structure & Algorithms
	Mathematics – III (Probability and Statistics)
	Electronic Devices Lab
	Digital System Design Lab
	Professional Practices-I Lab
	Data Structure & Algorithms Lab
	General Proficiency

Semester		Course Title
IV		Analog and Digital Communication
		Analog Circuits
		Microcontrollers
		Electromagnetic Field Theory
		Object Oriented Programming
		Indian Constitution*
		Analog and Digital Communication Lab
		Analog Circuits Lab
		Microcontrollers Lab
		Object Oriented Programming Lab
		General Proficiency
V		Electromagnetic Waves
		Computer Architecture
		Digital Signal Processing
		Bio-Medical Electronics
		Power Electronics
		Nano Electronics
		Optimization Techniques
		Electronic Material Processes
		Entrepreneurship Development
		Electromagnetic Waves Lab
		Digital Signal Processing Lab
		Internship Program Seminar
		Minor Project Lab-I
		General proficiency
VI		Control Systems
		Computer Network
		Probability Theory and Stochastic Processes
		Information Theory & Coding
		Speech and Audio Processing
	Introduction to MEMS	
	Marketing for Engineers	
	VLSI Design	
	Professional Ethics & Disaster Management	
	Computer Networks Lab	
	Electronic Measurement Lab	
	Electronics CAD Laboratory	
	Minor Project Lab-II	
	General proficiency	

Semester		Course Title
VII		Microwave Theory and Techniques
		Fiber Optic Communications
		Mobile Communication and Networks
		VHDL
		Embedded Systems
		Wireless Sensor Networks
		Digital Image & Video Processing
		Antennas and Propagation
		High Speed Electronics
		Artificial Intelligence Techniques
		Wind and Solar Energy Systems
		Microwave Lab
		Fiber Optic & Mobile Communication Lab
		Industrial Economics & Management Lab
		Major Project Lab
		General Proficiency
VIII		Industrial Project
		Comprehensive Viva – Voce/Academic Seminar
		General Proficiency

Courses offered in M.Tech Communication and Signal Processing (MTCSP)

Semester		Course Title
I		Introduction to Embedded Systems
		Antenna Theory
		Signal Theory
		Digital Signal Processor and Architecture
		Advance DSP Lab
Wireless Communication Lab		
II		Satellite Communication and Phase array
		Digital Communication System
		Embedded system for Wireless and Mobile Communication
		Information Theory And Coding
		Advanced Communication Lab
Technical Report Writing & Communication Skills -I		
III		Solid State Microwave Devices
		Advanced signal processing
		Advanced optical communication
		Telecommunication Switching and networks
		Advanced mobile communication
		Advanced embedded system
		Pre Dissertation Seminar
IV		Dissertation

Courses offered in M.Tech Embedded System (MTEES)

Semester	Course Title
I	Introduction to Embedded Systems Design
	Microcontroller for Embedded System Design
	Digital System Design
	Digital Signal Processor and Architecture
	Advance DSP Lab
II	Embedded Microcontrollers Lab
	CPLDs, FPGA Architecture and Application
	Embedded Real Time Operating System
	Embedded System for Wireless and Mobile Communication
	HDLs for Embedded Systems
III	Modeling and Simulation Lab
	Technical Report Writing & Communication Skills
	Embedded C
	Embedded Computing System Design
	Advanced Computer Architectures
IV	Design of CAD Tools for Embedded System Design
	Embedded Networking
	Memory Design and Testing
	Pre Dissertation Seminar
	Dissertation



Civil Engineering

Civil engineering in JNU is to provide students with a wide education spectrum in civil engineering fundamentals, applications, and design that prepares them for the practice of civil engineering at the professional level

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Civil Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Civil Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
M.Tech in Infrastructure & Construction Management	2 Years	B.Tech with min. 55 % in relevant Stream	ET+PI
M.Tech in Water Resource Engineering	2 Years	B.Tech with min. 55 % in relevant Stream	ET+PI



Courses offered in B.Tech Civil Engineering (BTECE)

Semester	Course Title
I	Engineering Physics –I
	Engineering Chemistry -I
	Engineering Mathematics -I
	Fundamentals of Electrical Science
	Introduction to IT and Computer Programming
	English I
	Environmental Studies
	Engineering Physics Lab –I
	Engineering Chemistry Lab –I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab –I
	General Proficiency
II	Engineering Physics –II
	Engineering Chemistry – II
	Engineering Mathematics -II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General Proficiency
	Civil Engineering Material
	Engineering Mechanics
III	Introduction to Fluid Mechanics
	Surveying and Geomatics-I
	Engineering Geology
	Mathematics – III (Probability and Statistics)
	Surveying-I Lab
	Fluid Mechanics Lab
	Computer Aided Civil Engineering Drawing
	Geology Lab
	Environmental Studies*
	General Proficiency**

Semester		Course Title
IV		Concrete technology
		Surveying and Geomatics-II
		Introduction to Solid Mechanics
		Hydraulic Engineering
		Environmental Engineering-I
		Indian Constitution*
		Surveying and Geomatics Lab-II
		Hydraulics Lab
		Environmental Engineering-I Lab
		Material Testing Lab
		Professional Practices-II Lab
		General Proficiency*
		Transportation Engineering -I
		Structural Engineering-I
V		Geotechnical Engineering- 1
		Environmental Engineering-II
		Internet of things
		Material Testing and Evaluation
		Civil Engineering-Social &Global Impact
		Renewable Energy Resources
		Entrepreneurship Development
		Structural Engineering Lab-I
		Transportation Engineering -I Lab
		Geotechnical Engineering Lab-I
		EE Lab-II Lab
		Professional Practices –III
		General Proficiency*
		Design Of Steel Structure -1
		Design Of Concrete Structure-I
VI		Water resource engineering -1
		Rural water sanitation and system
		Rock mechanics
		Transportation engineering -2
		Solid and hazardous waste management
		Engineering hydrology
		Geotechnical Engineering- II
		Metro system and engineering
		Hydropower engineering

Semester		Course Title
VI		Professional Ethics & Disaster Management
		Water Resources Engg -1. Lab
		Geotechnical Engineering-2 Lab
		Project Stage-I
		Design Of Steel Structure Lab -1
		Design of concrete structure lab
		General Proficiency*
		Design of Steel Structure-2
		Design of concrete structure-2
		Open channel flow
VII		Repair and rehabilitation of buildings
		Water Resources Engineering -2
		Earthquake engineering
		Foundation engineering
		Ground Improvement Technique
		Non-conventional sources of energy
		Project planning & construction management
		Construction Engineering & Management
		Water Resources Engineering Lab -2
		Project Stage-II
		Design of concrete structure lab-2
		Steel Structure Lab - II
		Discipline & Extra-Curricular Activities*
		Internship/Entrepreneurship Project Work
VIII		Presentation-II
		Emergent Technology /Academics Based Seminar
		Discipline & Extra-Curricular Activities*

Courses offered in M.Tech Infrastructure & Construction Management (MTIECM)

Semester	Course Title
I	Infrastructure planning
	Project Management & Infrastructure Construction
	Infrastructure Projects – Construction Methods and Equipment Management
	Numerical Methods
	Optimization Methods
	Disaster Management
	Application of Engineering Hydrology in Infrastructure
II	Financing Infrastructure Projects
	Advanced concrete Technology
	Projects Management Laboratory
	Project Procurement Systems
	Quality & Safety Management in Construction
	Spatial data collection and analysis
	Water Distribution & waste water collection system design
	Solid and hazards waste management
	Environmental Management
	Transportation System Management
	Public transportation system planning
	Water Resources systems analysis, planning and management
	M.Tech. Project -I
III	Seminar – I
IV	Advanced Structural Design
	M.Tech. Project -II
	Seminar – II

Courses offered in M.Tech Water Resource Engineering (MTWRE)

Semester	Course Name
I	Numerical Methods in civil Engineering
	Advance Hydrology
	Advance Irrigation Engineering
	Advance Hydraulics
	Design of Dams
	Air and Water Pollution Lab
	Hydro Power Engineering
II	Water Pollution & Sewage Treatment
	Drainage Engineering
	Open Channel Hydraulics
	Rock Mechanics
	Planning and Development of Water Resources
	Hydrodynamics and Modeling
	Computational Hydraulics
	Nonconventional Sources of Energy
	Disaster management
	Advance Hydraulic Lab
	Ground Water Engineering
	Soil & Rock Mechanics Lab
	Seminar
III	Dissertations- I
	Water and Soil Conservation Engineering
	Hydro Meteorology
	Earthquake Engineering
	Finite Element Methods
	Flood Control Engineering
	Urban Storm Water Drainage.
	Water and Soil Conservation Engineering
	Dissertation-II
IV	

Biotechnology

Biotechnology is making significant contributions to the world we live in. Biotechnology is an interdisciplinary fast-growing field of study and knowledge, having application in the domains of chemical, pharmaceutical and textile industries to genetics and agriculture.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Biotechnology	4 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI
B.Tech Biotechnology + MBA	5 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI



Courses offered in B.Tech Biotechnology (B.Tech BT)

Semester	Course Title
I	Engineering Physics -I
	Engineering Chemistry -I
	Engineering Mathematics — I
	Fundamentals of Electrical Science
	Introduction to IT and Computer Programming
	English I
	Environmental Studies
	Engineering Physics Lab -I
	Engineering Chemistry Lab -I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab -I
	General Proficiency
II	Engineering Physics -II
	Engineering Chemistry – II
	Engineering Mathematics –II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General Proficiency
	Introduction to Biology
	Cell Biology
III	Biochemistry-I
	Fluid Mechanics operations
	Bioprocess Calculations
	Indian Constitution
	Cell Biology
	Biochemistry-I
	Fluid Mechanics operations
	Group Discussion & Seminar
	Discipline and Extracurricular Activity

Semester		Course Title
IV		Microbiology
		Analytical Techniques in Biotechnology
		Biochemistry-II
		Biostatistics
		Molecular Biophysics
		Entrepreneurship Development
		Microbiology
		Analytical Techniques in Biotechnology
		Biochemistry-II
		Group Discussion & Seminar
		Discipline and Extracurricular Activity
V		Molecular Genetics
		Food Biotechnology
		Bio-nanotechnology
		Heat Transfer
		Object oriented programming using C++
		Perl for Biologist
		Java for Biologist
		Human Resource Development System and Organizational Behaviour
		Molecular Genetics
		Object oriented programming using C++
		Perl for Biologist
		Java for Biologist
		Heat Transfer
		Industrial Visit, Report & Presentation
	Discipline and Extracurricular Activity	
VI		Bioinformatics
		Recombinant DNA Technology
		Mass Transfer
		Genome Analysis
		Bioprocess Engineering
		Industrial Biotechnology
		Molecular Farming
		Environmental Laws

Semester		Course Title	
VI		Bioinformatics	
		Recombinant DNA Technology	
		Bioprocess Engineering	
		Mass Transfer	
		Discipline and Extracurricular Activity	
VII		Environmental Biotechnology	
		Database Management System	
		Animal Cell & Plant Tissue Culture	
		Immunology	
		Medical Biotechnology	
		System Biology	
		Metabolic Engineering	
		Open Elective Course	
		Environmental Biotechnology	
		Database Management System	
		Immunology	
		Seminar	
		Discipline and Extracurricular Activity	
		VIII	Industrial Internship/Project Work
			Presentation &Defense



Chemical Engineering

In today's modern world the material used in the various fields of engineering are produced in chemical reactors. Designing and operation of such reactors is the main domain of Chemical Engineers because they are well equipped with the knowledge of subjects like fluid mechanics, chemical reaction engineering, heat and mass transfer and economic analysis.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Chemical Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Chemical Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI



Courses offered in B.Tech Chemical Engineering (B.Tech CH)

Semester	Course Title
I	Engineering Physics — 1
	Engineering Chemistry — I
	Engineering Mathematics — I
	Fundamentals of Electricals Science
	Introduction to IT and Computer Programming
	English —1
	Environmental Studies
	Engineering Physics Lab —1
	Engineering Chemistry Lab —1
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab —1
	General Proficiency
II	Engineering Physics –II
	Engineering Chemistry – II
	Engineering Mathematics –II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication SkillsLab – II
	General Proficiency
	Mathematics-III
	Advance Engineering Chemistry
III	Fluid Mechanics
	Chemical Process Calculations
	Chemical Engineering Thermodynamics-I
	Constitution of India
	Advance Engineering Chemistry
	Fluid Mechanics
	Simulation Lab using MATLAB
	Technical Report Writing & Seminar
	General Proficiency

Semester		Course Title
IV		Fluid Particle Mechanics
		Mass Transfer Operation-I
		Industrial Pollution Monitoring & Control
		Chemical Engineering Thermodynamics-II
		Heat Transfer Operation
		Entrepreneurship Development
		Fluid Particle Mechanics
		Mass Transfer Operation-I
		Industrial Pollution Monitoring & Control
		Heat Transfer Operation
		General Proficiency
		Process Dynamics Instrumentation & Control
		Chemical Reaction Engineering-I
		Mass Transfer Operation-II
V		Optimization of Chemical Process
		Fertilizer Technology
		Open Elective Courses-I
		Process Dynamics Instrumentation & Control
		Chemical Reaction Engineering-I
		Mass Transfer Operation-II
		Practical Training & Seminar
		General Proficiency
		Chemical Reaction Engineering-II
		Chemical Process Modeling& Simulation
VI		Inorganic Chemical Technology
		Petrochemical Technology
		Biochemical Engineering
		Open Elective Courses-II
		Chemical Reaction Engineering-II
		Chemical Process Design & Simulation
		Chemical Technology
		Petrochemical Technology
		General Proficiency

Semester		Course Title
VII		Transport Phenomena
		Process Engineering & Plant Design
		Bioprocess Engineering
		Food Technology
		Organic Chemical Technology
		Open Elective Courses-III
		Process Plant Design
		Practical Training & Seminar
		Capstone Project
		General Proficiency
		Project
VIII		Seminar &Defense



Computer Science Engineering

Computer Science & Engineering is a study of designing, development and most of computers and computer-based systems. The study of computer science makes one competent to apply the basic principles of computing and use the latest methods to offer service solutions in academia & research.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Computer Science Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Computer Science Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI



Courses offered in B.Tech Computer Science Engineering (B.Tech CSE)

Semester	Course Title
I	Engineering Physics -I
	Engineering Chemistry -I
	Engineering Mathematics -I
	Fundamentals of Electrical Science
	Introduction to IT and Computer Programming
	English I
	Environmental Studies
	Engineering Physics Lab -I
	Engineering Chemistry Lab -I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab -I
	General Proficiency
II	Engineering Physics –II
	Engineering Chemistry – II
	Engineering Mathematics -II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General Proficiency
	Mathematics III
	Discrete Mathematical Structure
III	Data Structure and Algorithms, through 'C'
	Digital Electronics
	Analog Electronic Circuits
	Economics for Engineers
	Data Structure Lab
	Digital Electronics Lab
	Analog Electronic Circuits Lab
	Web Design Lab using HTML/ DHTML
	General Proficiency

Semester	Course Title
IV	Optimization Techniques
	Object Oriented Programming Using C++
	Computer Organization & Architecture
	Design & Analysis of Algorithms
	Communication Fundamentals
	Entrepreneurship Development
	OT Simulation Lab using Sci Lab/MATLAB
	Object Oriented Programming Lab
	Design & Analysis of Algorithms Lab
	Microprocessor Lab
	General Proficiency
V	Computer Graphics
	Operating System
	Database Management System
	Programming in Java
	Software Engineering
	Information Theory and Coding
	System Analysis And Design
	Open Elective
	Computer Graphics Lab (C/C++)
	Database Management System Lab
	Java Programming Lab
	UNIX Shell Scripting and TCP/IP Lab
VI	General Proficiency
	Computer Networks
	Application Development using Java
	Formal Language & Automata Theory
	Object Oriented Modeling and Design
	Software Testing
	Artificial Intelligence
	Real Time Systems
	Logical and Functional Programming
	Open Elective - II
	Indian Constitution
	Computer Networks Lab
	Application Development using Java Lab
	Python Lab
	Project Design with Seminar
	General Proficiency

Semester	Course Title
VII	Compiler Construction
	Relational Database Management System
	Image Processing & Pattern Recognition
	Cloud Computing
	Distributed Systems
	Android Programming
	Deep Learning & Neural Networks
	Data Mining and Warehousing
	Open Elective-III
	Compiler Construction Lab
	RDBMS Lab (SQL Server/Oracle)
	Android Programming Lab
VIII	Minor Project
	General Proficiency
	Internship/Entrepreneurship Project Work Presentation
	Emergent Technology/Academics based Seminar
	General Proficiency



Food Technology

Food Technology is a multidisciplinary course which involves the study of various areas such as:

Food Science and Technology Food Engineering

Food Quality and Safety

Food Chemistry and Nutrition Food Microbiology

Food Laws and Agribusiness Management

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Foodtechnology	4 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI
B.Tech Foodtechnology + MBA	5 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI



Courses offered in B.Tech Food Technology (B.Tech FT)

Semester	Course Title
I	Engineering Physics -I
	Engineering Chemistry -I
	Engineering Mathematics -I [Except BT and FT]
	Engineering Mathematics -I [For BT and FT]
	Fundamentals of Electrical Science
	Introduction to IT and Computer Programming
	English I
	Environmental Studies
	Engineering Physics Lab -I
	Engineering Chemistry Lab -I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab -I
	General Proficiency
II	Engineering Physics –II
	Engineering Chemistry – II
	Engineering Mathematics -II [Except BT and FT]
	Engineering Mathematics -II [For BT and FT]
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General Proficiency
III	Basic & Food Microbiology
	Food Chemistry
	Fluid Mechanics
	Process Calculations
	Indian Constitution
	Food Additives & Contaminants
	Basic & Food Microbiology Lab
	Food Chemistry Lab
	Fluid Mechanics
	General Proficiency

Semester	Course Title
IV	Biochemistry & Nutrition
	Principles of Food Processing & Preservation
	Heat Transfer Operations
	Refrigeration and Air conditioning
	Food Hygiene, Sanitation & Plant Utilities
	Food Laws & Food Regulations
	Fermentation Technology
	Biochemistry & Nutrition Lab
	Principles of Food Processing & Preservation Lab
	Heat Transfer Operations Lab
	Group Discussion & Seminar
	General Proficiency
V	Cereals & Legumes Processing Technology
	Egg, Poultry, Meat & Fish Processing Technology
	Milk & Milk Products Technology
	Mass Transfer Operations
	Chemical Reaction Engineering
	Human Resource Development System and Organizational Behaviour
	Entrepreneurship & Agribusiness Management
	Cereals & Legumes Processing Technology Lab
	Milk & Milk Products Technology Lab
	Mass Transfer Operations Lab
	Chemical Reaction Engineering Lab
	Practical Training and Seminar
	General Proficiency
VI	Fruits and Vegetables Processing Technology
	Oils and Fats Processing Technology
	Bakery and Confectionary Technology
	Advance Techniques in Food
	Biotechnological Tools in Food Analysis
	Food Process Engineering
	Unit Operations in Food Engineering
	Food Storage and Transport Engineering
	Food Analysis and Quality Control
	Fruits and Vegetables Processing Technology Lab
	Oils and Fats Processing Technology Lab
	Bakery and Confectionary Technology Lab
	Food Analysis and Quality Control Lab
	General Proficiency

Semester	Course Title
VII	Open Elective Subject
	Food Packaging
	Plant Design and Project Engineering
	Food Product Development, Marketing and Sales
	Food Industry Waste Management & By-Product Utilization
	Nutraceuticals, Functional and Therapeutic Foods
	Flavor Technology
	Industrial Safety and Hazards
	Food Industry Waste Management and By Product Utilization Lab
	Food Packaging Lab
	Plant Design and Project Engineering Lab
	Practical Training and Seminar
	General Proficiency
VIII	Industrial Internship/Project Work
	Presentation & Defence



B.Tech Biomedical Engineering (B.Tech BME)

Biomedical engineers design electrical circuits, software to run medical equipment, or computer simulations to test new drug therapies. In addition, they design and build artificial body parts, such as hip and knee joints. In some cases, they develop the materials needed to make the replacement body parts.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Biomedical Engineering	4 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI
B.Tech Biomedical Engineering+ MBA	5 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI



Courses offered in B.Tech Food Technology (B.Tech FT)

Semester	Course Name
I	Engineering Physics — I
	Engineering Chemistry — I
	Engineering Mathematics — I
	Fundamentals of Electrical Science
	Introduction to IT and computer programming
	English —I
	Environmental Studies
	Engineering Physics Lab —I
	Engineering Chemistry Lab —I
	Fundamentals of Electrical Science Lab
	IT and Computer Programming Lab
	Engineering Graphics & Design Lab
	Communication Skills Lab —I
	General proficiency
	Engineering Physics –II
II	Engineering Chemistry – II
	Engineering Mathematics –II
	Engineering Mechanics
	Programming for Problem Solving
	English – II
	Engineering Physics Lab – II
	Engineering Chemistry Lab-II
	Computer programming Lab
	Workshop Manufacturing Practices Lab
	Communication Skills Lab – II
	General proficiency
	Mathematics-III
	Anatomy & Physiology
	Biochemistry and histology
III	Electronics Measurement & Instrumentation
	Electronics Device and Circuits
	Environmental Engineering
	Object Oriented Programming
	Electromagnetic Field Theory
	Anatomy and Physiology Lab
	Biochemistry and Histology Lab
	Electronic Measurement Lab
	Electronics Lab
	Discipline & Extra Curricular activities

Semester		Course Name
IV		Biophysics
		Biomedical Instrumentation-I
		Transducers in Instrumentation
		Digital Electronics
		Communication System
		Mathematics-IV
		Optimization Technique
		Telemedicine
		Biomedical Instrumentation Lab-I
		Transducer Lab
		Digital Electronics Lab
		Communication Engineering Lab
		Discipline & Extra Curricular activities
V		Biomaterials and components
		Biomedical Instrumentation-II
		Biomedical- Signal Processing
		Linear Integrated Circuit
		Microprocessor
		Biostatistics
		Signal & System
		Hospital Engineering and Management
		Biomedical Instrumentation Lab-II
		Analog Electronics Lab
		Microprocessor Lab
		Electronic Workshop and PCB Lab
		Discipline & Extra Curricular activities
VI		Bioinformatics
		Clinical Science and Engineering
		Cardiovascular Instrumentation
		VLSI Design
		Microcontroller & Embedded System
		Medical Safety and Waste Management
		Neural Network and fuzzy logic
		Data Base Management Systems
		Clinical Science Lab
		Microprocessor and Microcontroller Lab
		Introduction to Good Laboratory Practice
		Humanities and Social Sciences Lab
		Discipline & Extra Curricular activities

Semester		Course Name
VII		Radiology and Medical Image
		Biosensors and MEMS
		Biomechanics
		VHDL
		Fiber Optics Instrumentation
		Image Processing & Pattern Recognition
		Advances in Biomedical Engineering
		Rehabilitation Engineering
		Medical Imaging Lab
		Matlab programming for bioengineering analysis
		Industrial Practical Training & Seminar Lab
		Project
		Discipline & Extra Curricular activities
VIII		Internship
		Major Project
		Discipline &Extra Curricular Activities

Dual Degree

The dual degree encompasses subjects from engineering along with subjects of Management

** For management courses please refer School of Business and Management



Seedling School of Law & Governance

Law as a profession has always attracted to young men and women who are in search of an adventurous career where one can mark in the society.

Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.A., L.L.B.	5 Years	10+2 pass	ET+ PI or CLAT score of min.45% marks
BBA, L.L.B. (Hons.)	5 Years	10+2 pass	ET+ PI or CLAT score of min. 45%marks
LLB-3YR	3 Years	Graduation with min. 45% marks	Merit+ PI
LLM	1 Year	LLB with min. 50%marks	ET+ PI
Ph. D.	Min. 3 years	LLM with min. 55% marks	ET+ PI



B.A., L.L.B (BALLB)

This program enriches students with the knowledge or arts and law.

Course offered in B.A., L.L.B (BALLB)

Semesters	Course Title
I	General English
	Political Science-1
	Computer Concepts
	History-1:Legal and Constitutional History of India
	Legal Research Methodology
	Law of Tort (M.V. Accident & Consumer Protection Law)
II	Communicative English
	Law of Contract-I
	Economics-I
	History-II
	Jurisprudence
	Political Science-II
III	Economics-II
	Political Science –III
	History-III
	Constitutional Law-I
	Law of Crimes-I(Penal Code)
	Law of Contract-II
IV	Economics-III
	Hindi/Foreign Language
	Constitutional Law-II
	Law of Crimes–II(Criminal Procedure Code)
	Political Science-IV
	Sociology
V	Political Science –V
	Public Interest Litigation and Legal Aid
	Administrative Law
	Family Law-I
	Civil Procedure and Limitation Act
	Law of Evidence
VI	Forensic Science
	Law of Insurance
	Family Law-II
	Company Law
	Media Law and Ethics
	Public Policy and Local Administration in India
	Internship with (High Court / Supreme Court)

Semesters		Course Title
VIII		Banking Law
		Labour Law-I
		Public International Law
		Environmental Law
		Special Crimes
		Law of Land Acquisition and Real Estates
IX		Labour Law-II
		Drafting, Pleading and Conveyancing
		Alternate Dispute Resolution
		<u>Private International law</u>
		<u>Competition Law</u>
		Corporate Governance
X		Internship and Diary (Internship with Judiciary /Legislatures/Legal Functionaries/Law firms Companies/Local Self Government/Legal Regulatory Authorities) (January)
		Professional Ethics and Professional Accounting System
		Law of the Sea / International Criminal Law
		Cyber Law
		International Humanitarian Law

BBA, L.L.B. (Hons.) (BBALLB)

This programme combines Management with the Bachelor of Law

Course offered in BBA, L.L.B. (Hons.) (BBALLB)

Semesters		Course Title
I		General English
		Principles of Management
		Computer Application
		Legal and Constitutional History of India
		LegalResearch Methodology
		Law of Tort (M.V. Accident & Consumer Protection Law)
II		Business Communication
		Law of Contract-I
		Economics-I
		Business Environment
		Jurisprudence
		Management Accounting

Semesters		Course Title
III		Economics-II
		Strategic Management
		Financial Management
		Constitutional Law-I
		Law of Crimes-I (Penal Code)
		Law of Contract-II
IV		Economics-III
		Hindi/ Foreign Language
		Constitutional Law-II
		Law of Crimes-II (Criminal Procedure Code)
		Human Resource Management
		Marketing Management
V		Organizational Behaviour
		Public Interest Litigation and Legal Aid
		Administrative Law
		Family Law-I
		Civil Procedure and Limitation Act
		Law of Evidence
VI		Forensic Science and Law
		Law of Insurance
		Family Law-II
		Company Law
		Media Law and Ethics
		Business Statistics
VII		Interpretation of Statutes
		Law of Transfer of Property
		Principles of Taxation Law-I
		Intellectual Property Rights
		Criminology, Penology and Victimology
		Human Rights
VIII		Banking Law
		LabourLaw-I
		Public International Law
		Environmental Law
		Special Crimes
		Law of Land and Real Estates
IX		Labour Law-II
		Drafting, Pleading and Conveyancing
		Alternate Dispute Resolution
		Private International Law
		Competition Law
		Corporate Governance
X		Internship and Diary (Internship with Judiciary /Legislatures/Legal Functionaries/Law firms Companies/Local Self Government/Legal Regulatory Authorities) (January)
		Professional Ethics and Professional Accounting System
		Law of the Sea / International Criminal Law
		Cyber Law
		International Humanitarian Law

LLB -3 Year (LLB 3 YEARS)

This program studies the major areas of legal practise

Course offered in LLB -3 Year (LLB 3 YEARS)

Semesters	Course Title
I	General English
	Law of Insurance
	Constitutional Law- I
	Legal and Constitutional History
	Legal Research Methodology
	Law of Torts (M.V. Accident and Consumer Protection Act)
II	Banking Law
	Law of Contract- I
	Constitutional Law-II
	Environmental Law
	Labour Law- I
	Right to Information
III	Internship With NGO/Court Visit
	Family Law-I
	Law of Transfer of Property
	Alternate Dispute Resolution
	LabourLaw-II
	Law of Crimes-I (Penal Code)
IV	Law of Contract- II
	Family Law-II
	Intellectual Property Rights
	Human Rights
	Jurisprudence
V	Company Law
	Principles of Taxation Law
	Public Interest Litigation and Legal Aid
	Administrative Law
	Public International Law
	Civil Procedureand Limitation Act
VI	Law of Evidence
	Moot court exercise and Internship Diary (Internship with Judiciary /Legislatures/Legal Functionaries/Law firms Companies/Local Self Government/Legal Regulatory Authorities) (January)
	Professional Ethics and Professional Accounting System
	Private International Law
	Cyber Law / International Criminal Law
	Competition Law

LLM (LLM)

This programme gives learning opportunities with specialisation

Course offered in LLM (LLM)

Business law

Semesters	Course Title
I	Research Methods & Legal Writing
	Law And Justice In Globalising World
	Comparative Constitutional Law
	Company Law
	Securities And Investment Law
	Intellectual Property Rights
II	Consumer Protection Law
	Banking Laws
	Insurance Laws
	Dissertation

Criminal law

Semesters	Course Title
I	Research Methods And Legal Writing
	Law And Justice In A Globalizing World
	Comparative Constitutional Law
	Criminology And Penology
	Criminal Justice And Human Rights
	Victimology & Juvenile Justice
II	General Principles Of Criminal Law
	General Principles Of Torts
	Socio-Economic Crimes
	Dissertation



School of Life & Basic Sciences

Science is a way of life that is based on perspective and the School has turned this inquiry-based thinking evolution into an art form over the years. The school of Life and Basic Science provides the correct platform to the aspiring students who wish to pursue their career in the area of life or basic sciences.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Sc. Pass Course (CBZ/PCM)	3 Years	10+2 Science/Biology/Mathematics/Agriculture/ Biotech. or Equivalent	Merit + P I
B.Sc. (Hons.) Biotechnology, Microbiology, Bioinformatics, Biochemistry, Physics and Mathematics		10+2 Science-PCB	
M.Sc. Biotechnology, Microbiology, Bioinformatics, Biochemistry, Food and Nutritional Biochemistry, Botany	2 Years	Graduation in any stream with min. 50% or B.Sc. Integrated	Merit + PI
M.Sc. Chemistry		Graduation in any stream of Basic Science with Chemistry as one of the Compulsory Subject - min. 55%	Merit + PI
M.Sc. Physics		Graduation in any stream of Basic Science with Physics and Mathematics and min. 50% or B.Sc. Integrated	Merit + PI
M.Sc. Mathematics		Graduation in any Stream of Basic Science with Mathematics as one of the Compulsory Subject- Min. 55%	Merit + PI
M.Sc. + MBA (Dual Degree) Biotechnology/Microbiology	3 Years	Graduation with min. 55% aggregate	Merit + PI
Ph.D.	Min. 3 Years	Post Graduation in relevant field with Min. 55%	ET + PI

B.Sc. Pass-Course (PCM)

This course enables the students to take up advanced studies in Chemistry, Mathematics, and Physics.

Courses offered in B.Sc. Pass - Course (PCM)

Semester	Course Title
I	Waves & Optics
	Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons
	Differential Calculus
	Professionals Communication Skills
	Waves & Optics Lab
	Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons Lab
II	Mechanics
	Chemical Energetics, Equilibria& Functional Group Organic Chemistry-I
	Differential Equation
	Environmental Studies
	Mechanics Lab
	Chemical Energetics, Equilibria& Functional Group Organic Chemistry-I Lab
III	Thermal Physics
	Solution Phase Equilibrium ,Conductance, Electro Chemistry & Functional Group Organic Chemistry-II
	Real Analysis
	Vector Calculus
	Thermal Physics Lab
	Solution Phase Equilibrium ,Conductance, Electro Chemistry & Functional Group Organic Chemistry-II Lab
IV	Electricity and Magnetism
	Transition Metal & Coordination Chemistry, States of Matter and Chemical Kinetics
	Algebra
	Pharmaceutical Chemistry
	Electricity and Magnetism Lab
	Transition Metal & Coordination Chemistry, States of Matter and Chemical Kinetics Lab

Semester		Course Title
V		Solid State Physics
		Organometallics, Bioinorganic Chemistry, Polynuclear Hydrocarbons and UV, IR Spectroscopy
		Linear Programming
		Entrepreneurship Development
		Solid State Physics Lab
		Organometallics, Bioinorganic Chemistry, Polynuclear Hydrocarbons and UV, IR Spectroscopy Lab
VI		Quantum Mechanics
		Quantum Chemistry, Spectroscopy & Photo Chemistry
		Numerical Methods
		Electrical circuits and Network Skills
		Quantum Mechanics Lab
		Quantum Chemistry, Spectroscopy & Photo Chemistry Lab

B.Sc. Pass - Course (CBZ)

This course enables the students to take up advanced studies in Chemistry, Botany, and Zoology and can find opportunities in all these subject areas.

Courses offered B.Sc (Pass Course) CBZ

Semester		Course Title
I		Plant Diversity
		Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons
		Animal Diversity
		Professional Communication Skills
		Plant Diversity Lab
		Atomic Structure, Bonding, General Organic Chemistry & Aliphatic Hydrocarbons Lab
		Animal Diversity Lab

Semester		Course Title
II		Plant Ecology & Taxonomy
		Chemical Energetic, Equilibria & Functional Group Organic Chemistry-I
		Comparative Anatomy & Developmental Biology
		Environmental Studies
		Plant Ecology & Taxonomy Lab
		Chemical Energetic, Equilibria & Functional Group Organic Chemistry-I Lab
		Comparative Anatomy & Developmental Biology Lab
		Plant Ecology & Taxonomy
III		Plant Anatomy & Embryology
		Conductance, Electro-Chemistry & Functional Group Organic Chemistry-II
		Physiology & Biochemistry
		Medicinal Botany*
		Plant Anatomy & Embryology Lab
		Conductance, Electro-Chemistry & Functional Group Organic Chemistry-II Lab
		Physiology & Biochemistry Lab
		Industrial visit
IV		Plant Physiology & Metabolism
		Transition Metal & Coordination Chemistry, States of Matter and Chemical Kinetics
		Genetics & Evolutionary Biology
		Pharmaceutical Chemistry*
		Plant Physiology & Metabolism Lab
		Transition Metal & Coordination Chemistry, States of Matter and Chemical Kinetics Lab
		Genetics & Evolutionary Biology Lab
		Cell & Molecular Biology
V	Organo metallic, Bioinorganic Chemistry, Poly-nuclear Hydrocarbons and UV, IR Spectroscopy	
	Immunology	
	Public Health & Hygiene*	
	Cell & Molecular Biology Lab	
	Organo metallic, Bioinorganic Chemistry, Poly-nuclear Hydrocarbons and UV, IR Spectroscopy Lab	
	Immunology Lab	
	VI	Economic Botany and Boitechnology
		Quantum Chemistry, Spectroscopy and Photochemistry
Applied Zoology		
Intellectual Property Right		
Practical-I (BBZBB601)		
Practical-II (BBZQP602)		
Practical-III (BBZAZ603)		

B.Sc. (Hons.) Biotechnology (BTH)

This course enables the students to take up advanced studies in Chemistry, Botany, and Zoology and can find opportunities in all these subject areas.

Courses offered B.Sc. (Hons.) Biotechnology (BTH)

Semester	Course Title
I	Biostatistics & Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry – I
	Practical-I (BTH-102 & BTH-103)
	Practical-II (BTH-101 & BTH 104)
II	Introductory Mathematics
	Programming Language Fundamentals and Applications
	Biochemistry – I
	Chemistry – II
	Practical-I (BTH-201 and BTH-202)
	Practical-II (BTH-203 and BTH-204)
III	Molecular Biology
	Biochemistry – II
	Chemistry III
	Professionals Communication Skills
	Practical-I (BTH-301 and BTH-302)
	Practical-II (BTH-303)
IV	Industrial Visit
	Fundamentals of Bioinformatics and Nanotechnology
	Biophysics and Instrumentation
	Plant Tissue Culture and Plant Biotechnology
	Developmental Biology
	Practical-I(BTH-401 and BTH-402)
V	Practical-II(BTH-403 and BTH-404)
	Environmental Biotechnology
	Animal Biotechnology
	Bioprocess Engineering
	Immunology
	Practical-I(BTH-501 and BTH-502)
VI	Practical-II(BTH-503 and BTH-504)
	Introduction to Genomes
	Recombinant DNA Technology
	Biodiversity and Environment
	Industry Relations and Entrepreneurship
	Practical-I(BTH-601 and BTH-602)
	Practical-II (BTH-603)
	Industrial Training

B.Sc. (Hons.) Microbiology (MH)

Microbiology is the study of microscopic organisms, such as bacteria, viruses, archaea, fungi and protozoa. Many of these microorganisms, however, carry out important functions in their niches that are essential for life forms.

Courses offered B.Sc. (Hons) Microbiology (MH)

Semester	Course Title
I	Biostatistics & Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry – I
	Practical-I (MH-102 & MH-103)
	Practical-II (MH-101 & MH-104)
II	Introductory Mathematics
	Programming Language Fundamentals and Applications
	Biochemistry – I
	Chemistry – II
	Practical-I (MH-201 and MH-202)
	Practical-II (MH-203 and MH-204)
III	Molecular Biology
	Biochemistry – II
	Chemistry III
	Professionals Communication Skills
	Practical-I(MH-301 and MH-302)
	Practical-II (MH-303)
IV	Industrial Visit
	Fundamentals of Bioinformatics and Nanotechnology
	Biophysics and Instrumentation
	Microbial Physiology and Metabolism I
	Industrial Microbiology
	Practical-I(MH-401 and MH-402)
V	Practical-II(MH-403 and MH-404)
	Virology
	Microbial Physiology and Metabolism II
	Food and Dairy Microbiology
	Immunology
	Practical-I(MH-501 and MH-502)
VI	Practical-II(MH-503 and MH-504)
	Environmental Microbiology
	Medical Microbiology
	Biodiversity and Environment
	Industry Relations and Entrepreneurship
	Practical-I(MH-601 and MH-602)
	Practical-II (MH-603)
	Industrial Training

B.Sc. (Hons.) Bioinformatics (BITH)

Bioinformatics is an interdisciplinary field that uses the applications of computational techniques to analyse the information associated with biomolecules on a large-scale. It is a firmly established discipline in computational Biology, and encompasses a wide range of subject areas from Structural Biology and Genomics to Gene Expression Studies, Systems Biology, Chem informatics & Drug Designing, Phylogenetic, Biostatistics, etc.

Courses offered B.Sc. (Hons) Bioinformatics (BITH)

Semester	Course Title
I	Biostatistics and Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry-I
	Practical-I(BITH-102& BITH-103)
	Practical-II(BITH-101&BITH-104)
	Introductory Mathematics
II	Programming Language Fundamentals and Applications
	Biochemistry-I
	Chemistry-II
	Practical-I(BITH-201andBITH-202)
	Practical-II(BITH-203andBITH-204)
	Pharmaco informatics
	Computational Biology
III	Chemistry III
	Professionals Communication Skills
	Practical-I(BITH-301andBITH-302)
	Practical-II(BITH-303)
	Industrial Visit
	Structural Bioinformatics and Nanotechnology
	Database Management System
IV	Phylogenetics & molecular evolution
	PERL programming
	Practical-I(BITH-401andBITH-402)
	Practical-II(BITH-403andBITH-404)
	Genome Analysis
	C++ and DSA
	Chem. informatics & Drug Designing
V	Immunology
	Practical-I(BITH-501andBITH-502)
	Practical-II(BITH-503andBITH-504)
	System Biology
	Genomics & Proteomics
	Biodiversity and Environment
	Industry Relations and Entrepreneurship
VI	Practical-I(BITH-601andBITH-602)
	Practical-II(BITH-603)
	Industrial Training

B.Sc. (Hons.) Biochemistry (BCH)

Biochemistry, sometimes called biological chemistry, is the study of chemical processes in living organisms. It deals with the structures and functions of cellular components, such as proteins, carbohydrates, lipids, nucleic acids and other biomolecules.

Courses offered B.Sc. (Hons) Bioinformatics (BCH)

Semester	Course Title
I	Biostatistics & Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry – I
	Practical-I (BCH-102 & BCH-103)
	Practical-II (BCH-101 & BCH-104)
	Introductory Mathematics
II	Programming Language Fundamentals and Applications
	Biochemistry-I
	Chemistry - II
	Practical-I (BCH-202)
	Practical-II (BCH-203 & BCH-204)
	Membrane Biochemistry
	Metabolism I
III	Chemistry III
	Professionals Communication Skills
	Practical-I (BCH-301& BCH-302)
	Practical-II (BCH-303)
	Fundamentals of Bioinformatics and Nanotechnology
	Biophysics and Instrumentation
	Metabolism II
IV	Immunology
	Practical-I (BCH-401 & BCH-402)
	Practical-II (BCH-403 & BCH-404)
	Endocrinology
	Clinical Biochemistry
	Molecular Biochemistry
	Genomics
V	Practical-I (BCH-301& BCH-302)
	Practical-II (BCH-303)
	Plant Biochemistry
	Enzymology
	Biodiversity and Environment
	Molecular Physiology
	Practical-I (BCH-601 & BCH-602)
VI	Practical-II (BCH-603& BCH-604)
	Industrial Training

B.Sc. (Hons.) Physics - B.Sc. (Hons) Phy

Semester		Course Title
I		Waves and Optics
		Analog Systems and Applications
		Object Oriented Programming in C++
		Environmental Science
		Waves and Optics Lab
		Analog Systems and Applications Lab
		Object Oriented Programming in C++ Lab
II		Mechanics
		Digital System and Applications
		Data Structures and File Processing
		English Communication
		Mechanics Lab
		Digital System and Applications lab
		Data Structures and File Processing Lab
III		Thermal Physics
		Mathematical Physics I
		Electricity and magnetism
		Mechanical Drawing
		Introduction to Database Systems
		Thermal Physics Lab
		Mathematical Physics I Lab
		Electricity and magnetism Lab
IV		Introduction to Database Systems Lab
		Elements of Modern Physics
		Quantum Mechanics and Applications
		Mathematical Physics II
		Electrical Circuit Network Skills
		Java Programming
	Elements of Modern Physics Lab	
	Quantum Mechanics and Applications Lab	
	Mathematical Physics II Lab	
Java Programming Lab		

Semester		Course Title
V		Mathematical Physics III
		Statistical Mechanics
		Experimental Techniques
		Nuclear and Particle Physics
		Mathematical Physics III Lab
		Statistical Mechanics Lab
		Experimental Techniques Lab
VI		Quantum Mechanics and Application
		Electromagnetic Theory
		Nano Materials and Applications
		Dissertation
		Quantum Mechanics and Application Lab
		Electromagnetic Theory Lab
		Nano Materials and Applications Lab



Semester	Course Title
I	Differential Calculus
	Algebra
	Introduction to Computers
	English Communication
	Practical-I (MAT-GE1)
II	Real Analysis I
	Differential Equations
	Mathematical finance
	Econometrics
	Environmental Science
III	Real Analysis II
	Group Theory I
	Partial Differential Equation
	Information Security
	Cryptography and Network Security
	Logic and Sets
	Practical-I (PDE)
IV	Multivariate Calculus
	Algebra II
	Metric Spaces and Complex Analysis I
	Combinatorics
	Applications of Algebra
	Operating System: Linux
	Practical-I (MAT-SEC2)
V	Ring theory and Linear algebra I
	Group Theory
	Linear Programming
	Industrial mathematics
	Probability and statistics
VI	Number theory
	Numerical Methods
	Ring theory and Linear algebra II
	Theory Of Equation
	Mathematical modeling
	Mechanics
	Practical-I(NM)



M.Sc. Biotechnology (MBT)

Biotechnology is a blend of subjects related to Biology and subjects like Mathematics, Physics, Chemistry and Engineering. It is a broad discipline in which biological processes, organisms, cells or cellular components are exploited to develop new technologies.

Courses offered M.Sc. Biotechnology (MBT)

Semester		Course Title
I		Cell Biology
		Biomolecules and Basic Enzymology
		Bioanalytical Techniques
		Immunology
		Virology
II		Microbial Diversity and Physiology
		Metabolism of Biomolecules
		Molecular Biology & Genetics
		Biostatistics and Bioinformatics
		Conventional & Biotechnological diagnosis of Infectious Disease
III		Genetic Engineering
		Environmental Biotechnology
		Animal cell science and technology
		Plant biotechnology and bioresource management
		Bioprocess engineering
IV		Dissertation

M.Sc. Microbiology (MMB)

This course helps learners to specialize in any of the applied research areas, through one of the chosen electives/specialized papers and work in the field of Medical Microbiology, Food Microbiology, Industrial Microbiology and Environmental Microbiology. This discipline emphasizes the recent trends in the industry that focus on production of compounds like insulin, interferon, recombinant products, including vaccines.

Courses offered M.Sc. Biotechnology (MMB)

Semester		Course Title
I		Bacteriology
		Mycology, Physiology & Lichen logy
		Immunology
		Biomolecules and Basic enzymology
		Analytical Techniques
II		Virology
		Molecular Biology and Genetics
		Microbial Physiology
		Biostatistics and Bioinformatics
	Biochemistry II/Metabolism of biomolecules	

Semester		Course Title
III		Genetic Engineering
		Industrial Microbiology
		Food Microbiology
		Medical microbiology
		Environmental microbiology
IV		Dissertation

M.Sc. Bioinformatics (MBIT)

Bioinformatics is an interdisciplinary field. It merges biology, computer science and information technology and is defined as an interface between the biosciences and the computational sciences.

Courses offered M.Sc. Biotechnology (MBIT)

Semester		Course Title
I		Basic Mathematics and Statistics (For biology students)
		Fundamentals of Biology (For non-biology students)
		Computers and Advanced Programming in C++
		Immuno informatics and Biochemical Techniques
		Bioinformatics and genome analysis
		Molecular Biology and Genetic Engineering
II		Computer Aided Drug Designing (CADD)
		Computational Biology
		System Biology
		Data Structure Algorithm
		Java Programming and Data mining
III		Functional and comparative genomics
		Metabolomics and Proteomics
		Gene Expression and Microarray analysis
		Molecular Structure Prediction and Visualization
		PERL and My SQL in Bioinformatics
IV		Pharmacogenomics
		Visual Basic and Web enabling Technology
		Dissertation

M.Sc. Botany (MBOT)

The subject of Botany encompasses a scientific study of plants that includes structure, growth, reproduction, metabolism, taxonomy, development, diseases and evolutionary relationship of different classes of plants.

Courses offered M.Sc. Botany (MBOT)

Semester		Course Title
I		Cell biology
		Biology & Diversity of Viruses & Bacteria
		Morphology and Diversity of Non – Vascular Plants
		Instrumentation & Analytical Techniques
		Plant Biochemistry
II		Morphology and Diversity of Vascular Plants
		Advance Plant Physiology
		Taxonomy and Economic Botany of Higher Plants
		Plant Tissue Culture & Its Applications
		Developmental Plant Biology
III		Embryology of Angiosperms
		Plant Ecology & Environment
		Genetics & Plant Breeding
		Molecular Biology & Genetic Engineering
		Phytochemistry and Ethnobotany
IV		Biostatistics & Bioinformatics
		Environmental Biotechnology
		Plant Biotech and Bioresource Management
	Plant Pathology	
	Dissertation	

M.Sc. MBA (Dual Degree) Biotechnology (MBT-MBA)

This dual degree programme encompasses subjects from Life & Basic Sciences along with subjects of business management. Apart from acquiring knowledge of their core area of Life & Basic Sciences, students will also be gaining knowledge of various aspects of Management-Marketing, General Management, Research Methodology, Finance, Human Resources, Production Management, International Business, Operations and Information Technology.

M.Sc. MBA (Dual Degree) Microbiology (MMB-MBA)

Along with the study of microscopic organisms, such as bacteria, viruses, archaea, fungi and protozoa, this dual degree offers insights into various subjects of business management. In addition to the advanced study of microbiology, students will also be gaining knowledge of various aspects of Management- Marketing, General Management, Research Methodology, Finance, Human Resources, Production Management, International Business, Operations and Information Technology. After the successful completion of M.Sc. + MBA, student will be awarded two Degrees- one in M.Sc. and the other in MBA (Integrated).

M.Sc. Chemistry (MSCCH)

Amongst the Basic Sciences, Chemistry deals with the study of composition, properties, constitution, and mutual interaction of different kinds of matter. The role of chemistry in modern society can be seen in diverse fields such as chemicals, petroleum products, pharmaceuticals, polymers and plastics and biotechnology.

Semester		Course Name
I		Inorganic Chemistry -I
		Organic Chemistry -I
		Physical Chemistry -I
		Maths for Chemist
		Biology for Chemist
		Inorganic Practical –I
		organic Practical –I
		PHYSICAL Practical –I
		Inorganic Chemistry -II
II		Organic Chemistry -II
		Physical Chemistry -II
		Computer for Chemists
		Inorganic Chemistry Practicals -II
		Organic Chemistry Practicals-II
		Physical Chemistry Practicals -II
III		Spectroscopy
		Group Theory & Instrumentation
		Organic Synthesis-I
		Heterocyclic Chemistry and Photochemistry
	Organic Practical-III	
IV	Green Chemistry	
	Synthetic Organic Chemistry -II	
	Chemistry of Natural Products	
	Bio Organic Chemistry	
	Project	

M.Sc. Physics (MSCPY)

Physics is a fundamental natural science. Besides exploring and identifying the basic principles and laws governing the motion, energy, structure and interaction of matter, it also deals with the pertinent questions about today's era of science and technology. Physics labs cover the vast areas of research in mechanics, properties of matter, heat, sound, electricity, magnetism, light, and modern physics.

Courses Offered M.Sc. Physics (MSCPY)

Semester	Course Title
I	Solid State Physics
	Classical Mechanics
	Quantum Mechanics-I
	Electronics
	General Physics
	Laboratory
II	Lasers and Holography
	Quantum Mechanics-II
	Atomic and Molecular Physics
	Electrodynamics
	Laboratory Project - I
	Electronics Laboratory-II
III	Nuclear and Particle Physics
	Mathematical Methods in Physics
	Thermodynamics and Statistical Physics
	Advanced Digital Electronics
	Microwave and Communication Lab
	Matlab Lab.
IV	Microwave Devices and Communications
	Analog and Digital Communication
	MAJOR PROJECT



M.Sc. Mathematics (MMAT)

Mathematics is one of the most ancient sciences of the world and has wide applications in various fields of study and research.

Courses Offered M.Sc. Mathematics (MMAT)

Semester	Course Title
I	Calculus of variation and special functions
	Differential Equation
	Real Analysis
	Industrial Mathematics
	C Programming (Theory)
	C' Programming (Practical)
	Communication & Soft Skills
II	Seminar
	Numerical and Statistical Techniques
	Abstract Algebra
	Mathematical Programming
	Continuum mechanics
	Computer Application (Theory)
	Optimization Techniques Simulation Lab
	Numerical & Statistical Techniques Lab
	Computer Application (Practical)
	Seminar
III	Linear Algebra
	Combinatorics and Graph Theory
	Integral Transforms
	Differential Geometry
	Advance differential equations
	Viscous Fluid Dynamics
	Seminar
	Functional Analysis
IV	Integral Equations
	Complex Analysis
	Topology and Measure Theory
	Number Theory (Elective-I)
	Operator in Hilbert space (Elective-II)
	Boundary Layer Theory (Elective-III)
	Mathematical Modelling and Numerical Simulation(Elective-IV)
	Dissertation

School of Business & Management

The School of Business and Management (SBM) is the institute of choice for discerning professionals and students desirous of a premium learning experience.

Programme Structure			
Programme	Duration	Eligibility	Selection Criteria
BBA	3 Years	10+2 any stream with min.50% marks	Merit + P I
B.Com		10+2 any stream with min.45% marks	
B.Com(H) ABST / B.Com (H) BADM	3 Years	10+2 with min.55% marks	Merit + P I
MBA	2 Years	Graduation with 50 % marks in any stream with good score in all India level aptitude test like MAT/CAT/CMAT/XAT/CET	ET/GD + PI
MBA Dual Specialization			
MBA (HHM) Hospital & Healthcare Management			
Ph.D. Management	3 Years min.	Post-Graduation in Management /Commerce and Allied Subjects with min. 55% marks	ET + PI



Bachelor of Business Administration (BBA)

BBA Course is a three year undergraduate business management programme that imparts managerial and entrepreneurial skills to students through BBA Courses.

Courses Offered Bachelor of Business Administration (BBA)

Semester	Course Title
I	Environmental Management
	Business Organization
	Managerial Economics
	Financial Accounting
	Business Statistics
	Entrepreneurship & Skill Development
II	Business Communication
	Principles and Practices of Management
	Business Environment
	Business Mathematics
	Management of Financial Institutions
	Business Ethics
III	Industrial Tour
	Indian Economy
	Marketing Management
	Cost Accounting
	Legal Framework
	IT for Managers
IV	Indian Diversity & Business
	Research Methods
	Human Resource Management
	Indian Financial System
	Management Accounting
	Tax Management
V	Event Management
	Survey Report
	Quantitative Techniques
	Company Law
	International Business
	Organizational Behaviour
VI	Security Analysis and Portfolio Management
	Banking Service and Operation
	Training and Development
	Leadership Skills and Change Management
	Consumer Behavior
	Management of Services
	Summer Training Report
	Strategic Management
	Auditing – Principles and Practice
	Project Management
	Outsourcing Management
	Financial Reporting
	Goods and Service Tax
	Industrial Relations
	Performance Management
	Product and Brand Management
	Retail Management

Bachelor of Commerce (B.Com)

The Bachelor of Commerce (B.Com) will provide you with broad foundation knowledge of contemporary business and its practices.

Courses Offered Bachelor of Commerce (B.Com)

Semester		Course Title
I		Indian Economy
		Financial Accounting
		Micro Economics
		Principles and Practices of Management
		Business Organization
		English
II		Environmental Management
		Regulatory Framework of Business
		Banking and Finance
		Business Mathematics
		Cost Accounting
		Hindi
III		Computer Application
		Personality Development
		Corporate Accounting
		Business Statistics
		Company Law
		Macro Economics
IV		French
		Leadership Skills and Change Management
		Event Management
		Human Resource Management
		Financial Management
		Tax Management
		Marketing Management
		Business Communication
V		Entrepreneurship & Skill Development
		Advertising Management
		Management Accounting
		Management of Services
		Training & Development
		Auditing – Theory & Practice
		Operations Management
		Security Analysis and Portfolio Management
		Management of Financial Institution
		Organization Behavior
		Indian Constitution
		Business Ethics

Semester		Course Title
VI		E-Commerce
		Insurance Management
		Advance Accounting
		Quantitative Techniques
		Monetary Policy
		Goods & Service Tax
		Business Budgeting
		Management Rural Development
		Cost and Management Audit
		Financial Reporting
		Industrial Relations
		Product & Brand Management
		Research Methods
		Project Management



Bachelor of Commerce (Honours) in Accountancy & Business Statistics (B.Com (H) ABST

This is the program offered to students to the students who wish to pursue their career in Accountancy related field.

Semester		Course Title
I		Principles of Management
		Business Economics
		Computer Applications
		Fundamentals of Accounting
		Business Mathematics
		Financial Accounting
II		Legal Aspects of Business
		Economic Environment
		Business Statistics
		Advanced Accounting
		Cost Accounting
		Financial Management
III		Industry Visit Report
		Business Communication
		Macro Economics
		Principles & Practices of Auditing
		Corporate Accounting
		Cost Analysis & Control
IV		Quantitative Techniques
		Business Ethics
		Indian Financial System
		Management Accounting
		Project Management*
		Event Management *
V		Production & Operation Management*
		Income Tax Law & Practice
		Cost & Management Audit
		Environment Management
		Company Law
		Business Budgeting
VI		Entrepreneurship and Skill Development
		Goods & Service Tax
		Security Analysis & Portfolio Management*
		Advance Statistics *
		Merchant Banking & Corporate Restructuring*
		Summer Training Report
VI		Marketing Management
		Management of Financial Institution
		E-Commerce
		Business Research Methods
		Financial Reporting *
		Financial & Commodity Derivatives*
		Risk Management –Tools & Application*
		Corporate Tax Management
		Report on Recent Trends in Finance

Bachelor of Commerce (Honours) in Business Administration (B.Com (H) BADM)

This is the program offered to students to the students who wishes to pursue their career in Business Administration as their specialisation.

SEMESTER		COURSE TITLE
I		Fundamentals of Accounting
		Business Economics
		Principles of Management
		Computer Applications
		Marketing Management
		Business Organisation
II		Financial Accounting
		Economic Environment
		Business Communication
		Legal Aspects of Business
		Consumer Behaviour
		International Business
III		Industry Visit Report
		Business Statistics
		Macro Economics
		Human Resource Management
		Product & Brand management
		Operation Management
IV		Marketing of Services
		Management Accounting
		Financial Management
		Business Ethics
		Industrial Relations
		Labour Welfare & Social Security
V		Talent Management
		Retail Management
		Outsourcing Management
		Indian Financial System
		Income Tax Law & Practice
		Company law
		Entrepreneurship & Skill Development
		Principles & Practices of Insurance
		Sales & Distribution Management
		Supply Chain Management
V		Strategic Management
		Summer Training Report

SEMESTER		COURSE TITLE
VI		Project Management
		Principles & Practices of Auditing
		Organization Behavior
		Human Resource Development
		History of Management Thought
		Business Research Methods
		E-Commerce
		Environmental Management
		Report on Recent Trends in Marketing

MBA

MBA is a 2 year professional postgraduate degree course. MBA focuses on the fundamentals of modern management, providing students with a comprehensive understanding of business while developing leadership and soft skills to implement that knowledge.

Courses Offered MBA

Semester		Course Title
I.		Management Accounting
		Principles and Practices of Management
		Organization Behavior and Design
		Quantitative Techniques for Management
		Managerial Economics
		Business Communication
		Computer Application in Management
		Environmental and Disaster Management
II		Human Resource Management
		Corporate Finance
		Marketing Management
		Operations & Production Management
		Research Methodology
		International Business Management
		Management Information Systems
		Indian Ethos and Business Values
III		Strategic Management
		Entrepreneurship & Managerial Skill Development
		Specialization Comprehensive Viva
		Industrial Summer Training Project
		Consumer Behavior
		Advertising and Brand Management
		Marketing of Services
		Rural Marketing
		Human Resource Development System & Strategies
		Manpower Planning & Management
		Organizational Change & Development
		Industrial Relations
		Financial Restructuring
		Security Analysis and Portfolio Management
		Financial Derivatives
		Management Control System
		E-Business
		System Analysis & Design

Semester		Course Title
IV		Project Management
		Business & Legal Environment
		Specialization Comprehensive Viva
		Retail Management
		Sales And Distribution Management
		Customer Relationship Management
		Integrated Marketing Communication
		Training and Development
		International Human Resource
		Compensation & Performance Management
		Competency Mapping and Talent Management
		Management of Financial Services & Institutions
		International Financial Management
		Corporate Tax Management
		Investment Management
		Data Communication and Networking
		Enterprise Resource Planning

MBA (Dual Specialization) - MBA (D)

MBA dual specialization is a two years post-graduation program. It gives you an extensive understanding of business finance, economics, and marketing as well as a variety of practical skills and work experience. Dual specialization is for candidates aspiring an exciting and challenging career in management.

Courses Offered MBA (Dual Specialization) - (D)

Semester		Course Title
I		Management Accounting
		Principles and Practices of Management
		Organization Behavior and Design
		Quantitative Techniques for Management
		Managerial Economics
		Business Communication
		Information Technology in Management
		Environmental and Disaster Management
II		Industrial Project/ Industrial Visit-I
		Human Resource Management
		Corporate Finance
		Operation & Production Management
		Research Methodology
		Marketing Management
		Data Communication and Networking
		Entrepreneurship & Managerial Skill Development
		Indian Ethos and Business Values
		Industrial Project/ Industrial Visit-II

Semester	Course Title
III	Strategic Management
	Economic and Legal Environment of Business
	Industrial Project III-Summer Internship Project/ Comprehensive –Specialization Viva
	Consumer Behavior
	Advertising & Brand Management
	Marketing of Services
	International Marketing
	Strategic Marketing
	Human Resource Development System & Strategies
	Human Resource Planning
	Industrial Relations
	Competency Mapping and Talent Management
	Performance Management
	Financial Restructuring
	Security Analysis and Portfolio Management
	Financial Derivatives
	Foreign Exchange Management
	Strategic Cost Management and Control
	Retail Marketing
	International Retailing
	Retail Sales Techniques and Promotions
	Visual Merchandising and Communication
	Retail Branding and Strategy
	Rural Economy and Development
	Rural Marketing
	Micro Financing Initiation in Rural Sector
	Entrepreneurship & Technology for developing Rural Sector
	NGOs and its HRD in Rural Sector
IV	E-Business
	Project Management
	Industrial Project IV (Preferred to be taken by a student in Industry where he/she would opt to take permanent placement)/Comprehensive –Specialization Viva
	Retail Management
	Sales And Distribution Management
	Customer Relationship Management
	Industrial Marketing
	Integrated Marketing Communication
	Product Management
	Training and Development
	International Human Resource
	Organizational Development
	Strategic Compensation Management
	Strategic Human Resource Management
	Empowerment and Participative Management
	Management of Financial Services & Institutions
	International Accounting
	International Financial Management
	Corporate Tax Management
	Investment Management
	Management Control System

MBA (Hospital & Health Care Management)

MBA with specialization in Hospital and Healthcare Management is a postgraduate course. This course aims at understanding the issues faced by health care systems, and the skills required for the perfect functioning of the healthcare sector.

Courses Offered MBA (Hospital & Health Care Management)

Semester	Course Title
I	Management Accounting
	Principles and Practices of Management
	Organizational Behavior and Design
	Essentials of Biostatistics
	Health Economics
	Business Communication
	Information Technology in Management
	Hospital Materials, Equipment & Supply Chain Management
	Comprehensive Viva
	Human Resource Management
II	Corporate Finance
	Organizational Management of Clinical & Superspeciality Services
	Research Methodology
	Marketing Management
	Essentials of Demography
	Entrepreneurship & Managerial Skill Development
	Diagnostic, Support & Utility Services
	Comprehensive Viva (Based on Hospital Visits)
	Strategic Management
	Quality & Accreditation in Healthcare
III	1st Project Work Presentation
	Health Care Delivery System & Policy
	Health and Development
	Healthcare Data Management and Analysis
	Hospital Management Information System
	Hospital Facility, Safety and Risk Management
	Hospital Planning and Administration
	Health Financing and Insurance
	Project Management
	2 nd Project Work Presentation
IV	Introduction to Epidemiology
	Public Health System and Outreach Programmes
	Community Health Services
	Health Legislation and Legal Issues
	Patient Care Management
	Disaster Management in Hospitals

Bachelor of Hotel Management & Catering Technology (BHMCT)

The programme prepares the students with a combination of necessary knowledge and hands-on training to take up responsibilities in the hospitality sector. Fully integrated teaching methods ensure academic excellence and

Course offered in Bachelor of Hotel Management & Catering Technology (BHMCT)

Semester	Course Title
I	Food Production Foundation -I
	Food & Beverage Service Foundation -I
	Front Office Foundation -I
	Housekeeping Foundation - I
	Applications of Computers
	Basic Hygiene & HACCP
	Food Production -I
	Food & Beverage Service Foundation -I
	Front Office Foundation -I
	Housekeeping Foundation - I
	Applications of Computers
	Inter-Personal Communication
II	Food Production Foundation -II
	Food & Beverage Service Foundation -II
	Front Office Foundation -II
	Housekeeping Foundation - II
	Food Science and Nutrition
	Business Communication
	Food Production Foundation -II
	Food & Beverage Service Foundation -II
	Front Office Foundation -II
	Housekeeping Foundation - II
	Food Science and Nutrition
	Business Communication
III	Food Production Operation -I
	Food & Beverage Service Operation -I
	Front Office Operation -I
	Housekeeping Operation - I
	Basic Accounting
	Principles of Management
	Food Production Operation -I
	Food & Beverage Service Operation -I
	Front Office Operation -I
	Housekeeping Operation - I
	Professional Behaviors & Mannerism



School of Hotel Management & Catering Technology

Hotel Management focuses on the development of human resource having technical competence for the hospitality industry.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B. Sc. H&HA	3 Years	10 + 2 Pass	ET + PI
BHMCT	4 Years	10 + 2 (any stream) with min. 40% Marks	
BHMCT - MBA	5 Years	10 + 2 (any stream) with min. 40% Marks	

Semester	Course Title
IV	Food Production Operation -II
	Food & Beverage Service Operation -II
	Front Office Operation -II
V	Housekeeping Operation – II
	Personality Development
	20 Weeks Industrial Training
VI	Food Production Operation -III
	Food & Beverage Service Operation -III
	Front Office Management
VII	House Keeping Management
	Management Information Systems
	Advance Food Production
VIII	Food & Beverage Management -I
	Facility Design & Management -I
	Sales & Marketing-I
	Financial Management-I
	Research Methodology
	Professional Elective/ Specialization -I
	Advance Food Production -I
	Food Production Management
	Food & Beverage Management -II
	Facility Design & Management -II
	Sales & Marketing-II
	Financial Management-II
	Research Methodology
	Professional Elective/ Specialization -II
	Advance Food Production -II
	Research Project

Bachelor of Science in Hospitality & Hotel Administration (B. Sc.) H&HA

The programme covers all the essential subjects of Hotel Management I the major areas of the industry like food and beverage services, business communication, and Catering, including a hospitality, front office management and organizational behaviour.

Course offered in Bachelor of Science in Hospitality & Hotel Administration (B.Sc.) H&HA

Semester	Course Title
I	Food Production Foundation– I
	Food & Beverage Service Foundation– I
	Front Office Foundation– I
	Hotel Housekeeping Foundation– I
	Applications of Computers
	Basic Hygiene & HACCP
	Food Production Foundation– I
	Food & Beverage Service Foundation– I
	Front Office Foundation– I
	Hotel Housekeeping Foundation–I
	Applications of Computers
	Inter personal Communication
II	Food Production Foundation –II
	Food & Beverage Service Foundation – II
	Front Office Foundation– II
	Hotel Housekeeping Foundation - II
	Food Science & Nutrition
	Business Communication
	Food Production Foundation – II
	Food & Beverage Service Foundation – II
	Front Office Foundation– II
	Hotel Housekeeping Foundation - II
	Food Science & Nutrition
	Business Communication
III	Food Production Operation- I
	Food & Beverage Service Operation - I
	Front Office Operation- I
	Housekeeping Operation – I
	Basic Accounting
	Principles of Management
	Food Production Operation- I
	Food & Beverage Service Operation - I
	Front Office Operation-I
	Housekeeping Operation -I
	Professional Behavior & Mannerism

Semester	Course Title
IV	20 weeks Industrial Training
V	Food Production Operation -II
	Food & Beverage Operation -II
	Front Office Operation -II
	Housekeeping Operation -II
	Hotel Accounting
	Hotel Laws & Risk Management
	Facility Design & Management-I
	Food Production Operation- II
	Food & Beverage Operation- II
	Front Office Operation- II
VI	Housekeeping Operation -II
	Personality Development
	Advance Food Production
	Advance Food & Beverage Operation
	Human Resource Management
	Food & Beverage Management
	Sales and Marketing
	Financial Management
	Facility Design & Management- II
	Advance Food Production
	Advance Food & Beverage Operation
	Management Information Systems (MIS)

BHMCT + MBA (BHMCT - MBA)

The Programme of Hotel Management focuses on preparing competent and committed professionals for the prevalent trends. Tourism and Hotel Industry. For MBA programme refer to School of Business and Management.

School of Pharmaceutical Sciences

Pharmacy being an integral part of healthcare system, the School of Pharmaceutical Sciences prepares the students to become pharmacists who can cater to the needs of modern healthcare systems. Pharmacists Education in India is in a transitional phase due to the rapid expansion & development of health care facilities from PHCs to the super specialty hospitals. The programmes of School has been approved by AICTE and PCI.

Programme Structure			
Programme	Duration	Eligibility	Selection Criteria
Bachelor of Pharmacy	4 Years	10+2 with min. 45% in PCM/ PCB	ET+PI
Master of Pharmacy (Pharmaceutics)	2 Years	B. Pharm with min 50% marks	
Master of Pharmacy (Pharmaceutical Chemistry)			
Master of Pharmacy (Pharmacology)			
Master of Pharmacy (Pharmaceutical Quality Assurance)			
Ph. D	3 years min.	M. Pharm with min 55% marks	Merit+PI
Doctor of Pharmacy	6 years	10+2 with min. 50% in PCM/ PCB	



Bachelor of Pharmacy (BPH)

Bachelor of Pharmacy is a 4 years Undergraduate degree program that deals with the intricacies of the pharmaceutical industry, starting from manufacturing medicines and drugs to dispensing them across various medical stores, distributors and stockists.

Courses Offered Bachelor of Pharmacy (BPH)

Semester	Course Title
I	Human Anatomy and Physiology I-Theory
	Pharmaceutical Analysis I -Theory
	Pharmaceutics I -Theory
	Pharmaceutical Inorganic Chemistry -Theory
	Communication skills -Theory
	Remedial Biology-Theory
	Remedial Mathematics -Theory
	Human Anatomy and Physiology I-Practical
	Pharmaceutical Analysis I -Practical
	Pharmaceutics I -Practical
	Pharmaceutical Inorganic Chemistry -Practical
	Communication skills -Practical
II	Remedial Biology -Practical
	Human Anatomy and Physiology II – Theory
	Pharmaceutical Organic Chemistry I – Theory
	Biochemistry – Theory
	Pathophysiology – Theory
	Computer Applications in Pharmacy – Theory *
	Environmental Sciences – Theory *
	Human Anatomy and Physiology I-Practical
	Pharmaceutical Organic Chemistry I– Practical
	Biochemistry– Practical
	Computer Applications in Pharmacy– Practical
	Pharmaceutical Organic Chemistry II– Theory
III	Physical Pharmaceutics I – Theory
	Pharmaceutical Microbiology– Theory
	Pharmaceutical Engineering – Theory
	Pharmaceutical Organic Chemistry II– Practical
	Physical Pharmaceutics I – Practical
	Pharmaceutical Microbiology– Practical
	Pharmaceutical Engineering –Practical
	Pharmaceutical Organic Chemistry III– Theory
	Medicinal Chemistry I– Theory
	Physical Pharmaceutics II– Theory
	Pharmacology I– Theory
	Pharmacognosy and Phytochemistry I– Theory
IV	Medicinal Chemistry I– Practical
	Physical Pharmaceutics II– Practical
	Pharmacology I– Practical
	Pharmacognosy and Phytochemistry I – Practical

Semester	Course Title
V	Medicinal Chemistry II – Theory
	Industrial Pharmacy I– Theory
	Pharmacology II– Theory
	Pharmacognosy and Phytochemistry II– Theory
	Pharmaceutical Jurisprudence – Theory
	Industrial PharmacyI – Practical
	Pharmacology II– Practical
	Pharmacognosy and Phytochemistry II – Practical
VI	Medicinal Chemistry III – Theory
	Pharmacology III – Theory
	Herbal Drug Technology – Theory
	Biopharmaceutics and Pharmacokinetics – Theory
	Pharmaceutical Biotechnology– Theory
	Quality Assurance –Theory
	Medicinal chemistry III – Practical
	Pharmacology III – Practical
VII	Herbal Drug Technology – Practical
	Instrumental Methods of Analysis – Theory
	Industrial PharmacyII – Theory
	Pharmacy Practice – Theory
	Novel Drug Delivery System – Theory
	Instrumental Methods of Analysis – Practical
	Practice School*
	Biostatistics and Research Methodology
VIII	Social and Preventive Pharmacy
	Pharma Marketing Management
	Pharmaceutical Regulatory Science
	Pharmacovigilance
	Quality Control and Standardization of Herbals
	Computer Aided Drug Design
	Cell and Molecular Biology
	Cosmetic Science
	Experimental Pharmacology
	Advanced Instrumentation Techniques
	Dietary Supplements and Nutraceuticals
	Project Work

Master of Pharmacy (Pharmaceutics) (MPHPH)

M.Pharm. Pharmaceutics or Master of Pharmacy in Pharmaceutics is a postgraduate Pharmacy course. Pharmaceutics is the discipline of pharmacy that deals with all facets of the process of turning a new chemical entity (NCE) into a medication able to be safely and effectively used by patients in the community.

Semester	Course Title
I	Modern Pharmaceutical Analytical Techniques
	Drug Delivery System
	Modern Pharmaceutics
	Regulatory Affair
	Pharmaceutics Practical I
	Seminar/Assignment
II	Molecular Pharmaceutics (Nano Tech and Targeted DDS)
	Advanced Biopharmaceutics & Pharmacokinetics
	Computer Aided Drug Delivery System
	Cosmetic and Cosmeceuticals
	Pharmaceutics Practical II
	Seminar/Assignment

Master of Pharmacy (Pharmaceutical Chemistry) (MPHPC)

Masters of Pharmacy in Pharmaceutical Chemistry is a two-year postgraduate course in the field of Pharmacy. M. Pharm Pharmaceutical Chemistry is a non-dispensing area of study in Pharmacy which deals more in research aspects of the subject over the service and patient care.

Semester	Course Title
I	Modern Pharmaceutical Analytical Techniques
	Advanced Organic Chemistry -I
	Advanced Medicinal chemistry
	Chemistry of Natural Products
	Pharmaceutical Chemistry Practical I
	Seminar/Assignment
II	Advanced Spectral Analysis
	Advanced Organic Chemistry -II
	Computer Aided Drug Design
	Pharmaceutical Process Chemistry
	Pharmaceutical Chemistry Practical II
	Seminar/Assignment

Master of Pharmacy (Pharmacology)(MPHPL)

M.Pharm. in Pharmacology is essentially concerned with the study of the interactions that occur between a living organism and chemicals affecting normal or abnormal biochemical function.

Semester		Course Title
I		Modern Pharmaceutical Analytical Techniques
		Advanced Pharmacology-I
		Pharmacological and Toxicological Screening Methods-I
		Cellular and Molecular Pharmacology
		Pharmacology Practical I
		Seminar/Assignment
II		Advanced Pharmacology-II
		Pharmacological and Toxicological Screening Methods-II
		Principles of Drug Discovery
		Experimental Pharmacology practical- II
		Pharmacology Practical-II
		Seminar/Assignment

Master of Pharmacy (Pharmaceutical Quality Assurance) (MPHQA)

M.Pharm in Pharmaceutical Analysis and Quality Assurance is a two-year post-graduate program for pharmacy students. Pharmaceutical is considered a part of the healthcare industry that deals with analysis, review, manufacturing, trial, and quality assurance of drugs/ medicines.

Semester		Course Title
I		Modern Pharmaceutical Analytical Techniques
		Quality Management System
		Quality Control and Quality Assurance
		Product Development and Technology Transfer
		Pharmaceutical Quality Assurance Practical I
		Seminar/Assignment
II		Hazards and Safety Management
		Pharmaceutical Validation
		Audits and Regulatory Compliance
		Pharmaceutical Manufacturing Technology
		Pharmaceutical Quality Assurance Practical II
		Seminar/Assignment

Course of study for M. Pharm. III Semester (Common for All Specializations)

Masters of Pharmacy (Common for all streams)	MPHPH301/ MPHPC301/ MPHPL301/ MPHQA301	Research Methodology and Biostatistics*
	MPHPH302P/ MPHPC302P/ MPHPL302P/ MPHQA302P	Journal club
	MPHPH303P/ MPHPC303P/ MPHPL303P/ MPHQA303P	Discussion / Presentation (Proposal Presentation)
	MPHPH304P/ MPHPC304P/ MPHPL304P/ MPHQA304P	Research Work

Course of study for M. Pharm. IV Semester (Common for All Specializations)

Masters of Pharmacy (Common for all streams)	MPHPH301/ MPHPC301/ MPHPL301/ MPHQA301	Journal Club
	MPHPH302P/ MPHPC302P/ MPHPL302P/ MPHQA302P	Research Work and Colloquium
	MPHPH303P/ MPHPC303P/ MPHPL303P/ MPHQA303P	Discussion/Final Presentation



Pharm. D (6 Year)

Doctor of Pharmacy is a programme of six academic years (five years of study and one year of internship or residency) full time with each academic year spread over a period of not less than two hundred working days.

Years	Course Title
I-Year	Human Anatomy and Physiology
	Pharmaceutics
	Medicinal Biochemistry
	Pharmaceutical Organic Chemistry
	Pharmaceutical Inorganic Chemistry
	Remedial Biology
	Remedial Mathematics
	Human Anatomy and Physiology
	Pharmaceutics
	Medicinal Biochemistry
II-Year	Pharmaceutical Organic Chemistry
	Pharmaceutical Inorganic Chemistry
	Remedial Biology
	Pathophysiology
	Pharmaceutical Microbiology
	Pharmacognosy and Phytopharmaceutics
	Pharmacology-I
	Community Pharmacy
	Pharmacotherapeutics-I
	Pharmaceutical Microbiology
III-Year	Pharmacognosy and Phytopharmaceutics
	Pharmacotherapeutics-I
	Pharmacology - II
	Pharmaceutical Analysis
	Pharmacotherapeutics - II
	Pharmaceutical Jurisprudence
	Medicinal Chemistry
	Pharmaceutical Formulations
	Pharmacology - II
	Pharmaceutical Analysis
	Pharmacotherapeutics - II
	Medicinal Chemistry
	Pharmaceutical Formulations

Years	Course Title
IV-Year	Pharmacotherapeutics - III
	Hospital Pharmacy
	Clinical Pharmacy
	Biostatistics & Research Methodology
	Biopharmaceutics & Pharmacokinetics
	Clinical Toxicology
	Pharmacotherapeutics - III
	Hospital Pharmacy
	Clinical Pharmacy
	Biopharmaceutics & Pharmacokinetics
V-Year	Clinical Research
	Pharmacoepidemiology and Pharmacoeconomics
	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring
	Clerkship
	Project Work



School of Computer & Systems Sciences

School of Computer & Systems Sciences The role of IT and IT enabled services in our interaction with many government and non government agencies is increasing with the changing scenario of development. All the programmes being offered by the School have been designed with inputs from leading academicians and industry leaders to mentor and groom technology experts for the future. The curricula of the programmes of the school aim at practical understanding of all the concepts with major emphasis on creative thinking and innovation.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
BCA	3 Years	10 + 2 from any stream with min. 48% marks	Merit + Interview
MCA	3 Years	Graduation in any stream with a min. of 50% and Mathematics and one of the subjects, either at 10+2 or graduation level	Entrance Test + Interview
PGDCA	1 Year	Graduation in any stream with a min. of 48% marks	Merit + Interview
M. Tech. (Computer Science Engg.)	2 Years	Pass with 55% aggregate marks in BE/ B. Tech (CSE/IT/ECE) or MCA/M. Sc. (IT/Computer Science) or equivalent	Entrance Test + Interview
Ph. D. (Computer Science)	3 Years (Min.)	For Com. Sci. min. 55% aggregate in MCA/M.Sc. (Comp. Sci.)/M.Sc. - IT for Com. Sci. & Engineering: Min. 55% aggregate in M. Tech. (Comp. Sci.)/IT	Entrance Test + Interview

Bachelor of Computer Application (BCA)

Bachelor of Computer Applications (BCA) is a 3-year (six semesters) undergraduate programme in Computer Applications. The objective of Bachelor of Computer Applications is to demonstrate the sound knowledge in key areas of Computer Science or Industrial Computing.

Course offered in Bachelor of Computer Application (BCA)

Semester	Course Title
I	Introduction to Problem Solving using 'C'
	Fundamentals of Computers and PC Tools
	Elementary Mathematics
	Digital Electronics
	English-I
	C Programming Lab
	Office Automation Tool Lab
	Digital Electronics Lab
II	Database Management System
	Discrete Mathematics
	Analysis of Algorithms and Data Structures
	HTML Programming
	Environment Science
	Database Management System Lab
	Data Structures Using 'C' Lab
	Data Structure Using 'C'
III	Discrete Mathematics
	Software Engineering -I
	DBMS-I
	Communication & Soft Skills
	Data Structure Lab
	DBMS Lab-I
	Communication & Soft Skills
	Object Oriented Programming using C++
IV	Operating System
	Advanced Internet Technologies
	DBMS-II
	Software Engineering -II
	C++ Lab
	Advanced IT Lab
	DBMS Lab-II
	Unix and Shell Programming
V	Core Java
	Computer Based Numerical Methods
	Computer Networks
	Environmental Science
	Unix and Shell Programming Lab
	Java Programming Lab
	Seminar
	Management Information System
VI	.Net Programming
	Computer Graphics and Multimedia
	Operations Research
	.Net Programming Lab
	Computer Graphics and Multimedia Lab
	Project

Master of Computer Application (MCA)

Master of Computer Application is a three-year professional Master's Degree programme in Computer Science. The broad objective of MCA programme is to prepare graduate students for productive careers in software industry and academia by providing appropriate environment for teaching and research in the core and emerging areas of the discipline.

Course offered in Master of Computer Application (MCA)

Semester	Course Title
I	Mathematical Foundation of Computer Science
	Computer and 'C' Programming
	Computer Organization & Architecture
	Data Base Management System
	Accounting and Financial Management
	Office Management Lab
	Programming in C lab
	DBMS Lab
	Communication & Soft Skills -I
	Data Structure Using C
II	Computer Oriented Numerical and Statistical Techniques
	Operating System
	Data Communication & Computer Networks
	Environmental Science
	Data Structures Using C Language Lab
	Numerical & Statistical Techniques Lab
	Unix & Shell programming Lab
	Communication & Soft Skills -II
	Object Oriented Programming with C++
	System Analysis and Design
III	Computer Graphics
	Artificial Intelligence
	Design and Analysis of Algorithm
	Object Oriented Programming with C++ Lab
	Computer Graphics Lab
	DAA Lab
	Communication & Soft Skills - III
	Software Engineering
	Java Programming
	Compiler Design
IV	Computer Based Optimization Techniques

Semester	Course Title
IV	Microprocessor Design and Assembly Language
	Software Engineering Lab
	Java Programming Lab
	Microprocessor Lab
	Communication & Soft Skills -IV
	RDBMS Concepts and introduction to SQL
	WEB Technology
	Advanced Database Concepts
	Advanced Java Programming
	Android Programming
V	NET Framework and ASP.NET
	Management Information System
	Parallel Processing
	Mobile Computing
	Data Warehousing & Data Mining
	Real Time Systems
	WEB Technology Lab
	Advanced Database Concepts Lab
	Advanced Java Programming Lab
	Android Programming Lab
VI	NET Lab
	Communication & Soft Skills -V
	Industrial Project

Post Graduate Diploma Course in Computer Applications programme (PGDCA)

PGDCA is a one-year (two semesters) Post Graduate Diploma Course in Computer Applications programme. The programme provides overall proficiency to the students in both hard and soft skills.

Course offered in Post Graduate Diploma Course in Computer Applications programme (PGDCA)

Semester	Course Title
I	Mathematical Foundation of Computer Science
	Computer and 'C' Programming
	Computer Organization & Architecture
	Data Base Management System
	Accounting and Financial Management
	Office Management Lab
	Programming in C lab
	DBMS Lab
	Communication & Soft Skills -I
II	Data Structure Using C
	Computer Oriented Numerical and Statistical Techniques
	Operating System
	Data Communication & Computer Networks
	Environmental Science
	Data Structures Using C Language Lab
	Numerical & Statistical Techniques Lab
	Unix & Shell programming Lab
	Communication & Soft Skills -II



M. Tech. (Computer Science) (M. Tech-CS)

M.Tech. (Computer Science) gives in-depth & detailed knowledge of various fields of computer science. The programme is designed to make students professionally sound to cope with the challenges of modern day IT sector. The students have an option to undertake a project work in lieu of some of the course. The programme aims at preparing the students to take up application, research and development activities in core and some emerging areas in Computer Science, with focus on AI and AI related applications in a distributed computing environment.

Semester	Course Title
I	Cryptography & Network Security
	AI and Fuzzy Logic
	Advanced Operating Systems
	Advanced DBMS
	Elective -1
	Object Oriented Design & Construction
	Modern Compiler Design
	Advance Data Communication & Network
	Cryptography Lab.
II	ADBMS Lab.
	Advanced Data Structures & Algorithms
	Advanced Computer Architecture
	Real Time and Embedded Systems
	Data Mining and Bio Informatics
	Elective -2
	Soft Computing
	Wireless and Mobile Communication
	Simulation and Modelling
III	Algorithm Analysis Lab.
	Wireless & Mobile Com Lab
	Information Retrieval
	Research Methodology
	Parallel & Distributed Computing
	Elective-3
	Digital Signal Processing
	Data Mining & Knowledge Management
	Animation and Advanced Computer Graphics
IV	Information Retrieval Lab.
	Seminar
	Seminar
	Dissertation

School of Education

Perfecting pedagogy is the life force of this School, which has emerged as a premier institute of Pedagogical Studies and Research. It is also known as the first B Ed college in Rajasthan to introduce educational technology through content analysis, concept mapping, use of Bloom's Taxonomy, and Constructivist Taxonomy.

Programme Structure			
Programme	Duration	Eligibility	Selection Criteria
Bachelor of Education	2 years	Graduation with min.50% marks	ET + P I (Reservation as per Govt. Norms)
Bachelor of Arts	3 years	10+2 any stream	Merit + P I
Bachelor of Arts, Bachelor of Education	4 years	10+2 with min.50% (reservation as per Govt. norms)	ET + P I
Bachelor of Science, Bachelor of Education			
Master of Education	2 years	Graduation in Education with min. 50% marks	ET + P I (Reservation as per Govt. Norms)
M. Phil	1 year	M.Ed./MA in Education with 55% Marks	ET + P I
Ph. D	3 years min.	M.Ed./MA in Education with 55% marks	ET + P I

Bachelor of Education (BED)

B.Ed or Bachelor of Education is a 2 year professional course that is done after graduation to work as a teacher in schools. According to the National Council of Teacher Education (NCTE) it is mandatory for all teachers to have a B.Ed course. Bachelor of Education (BED) is a professional course and right after completing this course, students can get a job at school level.

Courses offered in Bachelor of Education (BED)

Semester	Course Title
I	Childhood and Growing up
	Contemporary India and Education
	Language across the curriculum
	Understanding Disciplines and Subjects : Social Science/ Science/ Language
	Yoga Health and Personality
II	Teaching and Learning
	Drama and Art in Education
	Assessment for Learning
	Computer Application in Education
	Pedagogy of a School Subject – Part I
III	Pedagogy of a School Subject – Part II
	School Internship
	Knowledge and Curriculum Part II
	Critical Understanding of ICT
	School Internship
IV	Gender , School and Society
	Creating an Inclusive School
	Peace Education
	Environmental Education
	Post Internship



Bachelor of Arts (BAP)

It is a 3 year program that enables you with necessary skills to sustain and succeed in different work cultures such as critical and innovative thinking.

Courses offered in Bachelor of Arts (BAP)

Semester	Course Title
I	Essential Language Skills
	Introduction To Sociology
	Foundations Of Political Science
	Ancient History Of India (Upto 1200 A.D.)
	Poetry And Drama
	Micro Economics
	Physical Geography
	Principles Of Psychology
	Principles Of Public Administration
	Contemporary India And Education
	Essential Language Skills
II	Indian Society
	Representative Indian Political Thinkers
	History Of Rajasthan
	Prose And Fiction
	Indian Economics
	Geography Of Rajasthan
	Abnormal Psychology
	Public Administration In India
	Learning And Teaching
	Hindi
III	Survey Methods In Social Investigations
	Selected Political System
	Medieval India (1206-1740 A.D.)
	Poetry And Drama
	Macro Economics
	Human Geography
	Social Psychology
	Administrative Institutions In India

Semester	Course Title
IV	Hindi Compulsory
	Social Problems In Contemporary India
	Indian Political Systems
	Main Trends In Cultural History Of India
	Prose And Fiction
	Public Finance
	Geography Of India
	Experimental Psychology
	State Administration In India
	Elementary Computer Application
V	Social Thinkers
	Representative Western Political Thinkers
	World History
	Poetry And Drama
	Statistics For Economic Analysis
	Economic Geography
	Psychology Of Human Development
	Comparative Public Administration
	Computer
	Introducing Sub Sociologies
VI	International Relations Since
	Modern Indian History
	Prose And Fiction
	Money And Banking
	World Geography
	Foundations Of Personality
	State Administration In India

Bachelor of Arts Bachelor of Education (BABED)

Integrated Programme of Teacher Education titled 'Bachelor of Arts Education' (B.A., B.Ed.) is a degree programme. The programme will be of four year duration organized on the semester pattern with 2 semesters in a year.

Courses offered in Arts Bachelor of Education (BABED)

Semester	Course Title
I	Essential Language Skills (English)
	Yoga ,Health and Personality (Theory)
	Yoga ,Health and Personality (Practical)
	Sociology-I (Introduction to Sociology)
	Sociology-II (Indian Society)
	History-I (Ancient History of India)
	History-II (History of Rajasthan)
	Political Science-I (Introduction to Political Science)
	Political Science-II (Introduction to Political Theory)
	English Literature –I (Poetry and Drama)
	English Literature –II (Prose and Fiction)
	Geography-I (Physical Geography)
	Geography-II (Geography of Rajasthan)
	Geography-III (Practical)
	Economics –I (Micro Economics- Basics)
	Economics –II (Micro Economics -Advanced)
	Psychology-I (Introduction to Psychology)
	Psychology-II (Human Development)
	Psychology -III(Practical)
	Public Administration- I
	Public Administration-II
	Hindi Literature-I (fgUnh Hkk"kk dk mn~Hko ,oa fodkl)
	Hindi Literature-II (Hkkjrh; dkO;'kkL=)
	Drawing and Painting –I(Fundamental of Visual Art)
	Drawing and Painting-II (Practical- Still Life)
	Drawing and Painting -III (Practical- Creative Design)
	Home Science (Physiology/ Applied Life Science)
	Home Science (Family Resource Management & Housing)
	Home Science (Practical)
	Urdu Literature-I
	Urdu Literature-II

Semester	Course Title
II	Computer Application in Education
	Teaching and Learning
	Sociology-I (Society, Culture and Globalization)
	Sociology-II (Social Problems in India)
	History-I (Medieval History)
	History-II (Main Trends of Indian Culture and Art))
	Political Science-I (Indian Political Thought)
	Political Science-II (Indian Polity)
	English Literature –I (Poetry and Drama)
	English Literature –II (Prose and Fiction)
	Geography-I (Human Geography)
	Geography-II (Geography of Resources and its Utilization
	Geography-III (Practical)
	Economics –I (Indian Economics)
	Economics –II (Economy of Rajasthan)
	Psychology-I (Social Psychology)
	Public Administration- I
	Public Administration-II
	Hindi Literature –I (आधुनिक काव्य)
	Hindi Literature –II (प्रयोजनमूलक हिंदी)
	Drawing and Painting –I(Art in education, culture and society)
	Drawing and Painting-II (Practical- Still Life)
	Drawing and Painting -III (Practical- Rendering)
	Home Science-I (Child Development)
	Home Science-II(Food and Nutrition)
	Home Science (Practical)
	Urdu Literature -I
	Urdu Literature-II

Semester	Course Title
III	General Hindi
	Knowledge and Curriculum
	Sociology (Survey Methods in Social Investigations)
	Sociology (Environment and Society)
	Political Science (Indian Constitution)
	Political Science (Indian Political Thoughts)
	History (World Civilization)
	History (Modern History of India - 1707 AD-1857 AD)
	English Literature (Poetry and Drama)
	English Literature (Prose and Fiction)
	Economics (Macro Economics-I)
	Economics (Macro Economics-II)
	Geography (Geography of India)
	Geography (Economic Geography)
	Geography (Practical)
	Psychology (Psychopathology)
	Psychology (Psychological Assessment and Statistics)
	Psychology (Practical)
	Hindi Literature (HkfDRkdkyhu dkO;)
	Hindi Literature (fgUnh fo/kk;sa)
	Drawing and Painting (History of Indian Painting and Sculpture)
	Drawing and Painting (Practical -Landscape Painting)
	Drawing and Painting(Practical – Composition)
	Home Science (Nutrition in Health and Disease
	Home Science (Family Dynamics and Parent Education)
	Home Science (Practical)
	Urdu Literature -I
	Urdu Literature -II

Semester	Course Title
IV	Essential Language Skills -II
	Assessment for Learning
	Sociology-I (Rural Sociology)
	Sociology-II (Social Change in India)
	History-I (Modern History of India (1857 to 1947)
	History-II (Indian After 1947)
	Political Science-I (Representative Western Political Thinkers)
	Political Science-II (State Polity of Rajasthan)
	English Literature –I (Poetry and Drama)
	English Literature –II (Prose and Fiction)
	Geography-I (Geography of Asia)
	Geography-II (Environmental Geography)
	Geography-III (Practical)
	Economics –I (Public Finance)
	Economics –II (Statistics for Economic Analysis)
	Pedagogy of a School Subject – Part I
	• Pedagogy of English
	• Pedagogy of Sanskrit
	• Pedagogy of Commercial Practices
	• Pedagogy of Political Science
	• Pedagogy of Chemistry
	• Pedagogy of Mathematics
	• Pedagogy of General Science
	• Pedagogy of Social Science
	Pedagogy of a School Subject – Part II
	• Pedagogy of History
	• Pedagogy of Drawing and Painting
	• Pedagogy of Economics
	• Pedagogy of Hindi
	• Pedagogy of Geography
	• Pedagogy of Book Keeping
	• Pedagogy of Biology
	• Pedagogy of Physics
	• Pedagogy of Social Science
	Public Administration-I
	Public Administration-II
	Hindi Literature –I (Natak Tatha Nibandh)
	Hindi Literature –II (Bhasha Vigyan)
	Drawing and Painting –I(History of Indian Painting and Sculpture- II)
	Drawing and Painting-II (Practical- Nature Life)
	Drawing and Painting -III (Practical- Composition)
	Home Science-I (Home Science Education and Extension)
	Home Science-II(Textile Designing and Apparel Making)
	Home Science (Practical)
	Urdu Literature -I
	Urdu Literature -II



Semester	Course Title
V	Environmental Education
	Contemporary India and Education
	Sociology-I (Population Studies)
	Sociology-II (Classical Socio Thinkers)
	Political Science-I (Western Political Thinkers)
	Political Science-I (International Relations)
	History-I (World History – 1453 to 1815)
	History-II (World History – 1815-1945)
	English Literature-I (Poetry and Drama)
	English Literature-II (Prose and Fiction)
	Economics-I (Development Economics-I)
	Economics-II (Development Economics-II)
	Geography-I (World Geography - I)
	Geography-II (Agriculture Geography)
	Geography (Practical)
	Psychology-I (Child Psychology)
	Psychology-II (Adolescent Psychology)
	Psychology (Practical)
	Hindi Literature-I (हिंदी पद्य)
	Hindi Literature-II (शैतिकालीन काव्य)
	Drawing and Painting (History of Ancient Art and Western Art)
	Drawing and Painting (Practical – Anatomy)
	Drawing and Painting(Practical- Study from life)
	Home Science (Fundamentals of A/D)
	Home Science (Interior Decoration)
	Home Science (Practical)



Semester	Course Title
VI	General Hindi
	Childhood and Growing Up
	Sociology-I ()
	Sociology-II ()
	Political Science-I ()
	Political Science-I ()
	History-I ()
	History-II ()
	English Literature-I (Poetry and Drama)
	English Literature-II (Prose and Fiction)
	Economics-I ()
	Economics-II ()
	Geography-I ()
	Geography-II ()
	Geography)
	Psychology-I ()
	Psychology-II (Adolescent Psychology)
	Psychology (Practical)
	Hindi Literature-I (हिंदी पद्य)
	Hindi Literature-II (शैतिकालीन काव्य)
	Drawing and Painting (History of Ancient Art and Western Art)
	Drawing and Painting (Practical – Anatomy)
	Drawing and Painting(Practical- Study from life)
	Home Science (Fundamentals of A/D)
	Home Science (Interior Decoration)
	Home Science (Practical)
	School Internship (Two Weeks)
VII	Gender , School and Society
	Creating an Inclusive School
	Pedagogical Inputs
	School Internship (Two Weeks)
	School Internship (Sixteen Weeks)
VIII	Drama and Art in Education
	Guidance and Counselling in Schools
	Peace and Value Education
	Indian Constitution and Human Rights
	Post Internship

Bachelor of Science Bachelor of Education (BSCBED)

For Science Teachers, Bachelor of Science Education is a degree awarded to students who accomplish the four year programme of study in the field of science (in biology, chemistry, physics, and math) with major Educational courses.

Courses offered in Bachelor of Science Bachelor of Education (BSCBED)

Semester	Course Title
I	Essential Language Skills-I (English)
	Yoga ,Health and Personality (Theory)
	Yoga and Health (Practical)
	Chemistry –I (Physico-inorganic Chemistry)
	Chemistry-II (Physico-organic Chemistry)
	Chemistry (Practical)
	Botany-I (Introductory Microbiology)
	Botany –II (Algae, Fungi and lichen)
	Botany (Practical)
	Zoology –I (Animal Diversity)
	Zoology –II (Cell and Molecular Biology)
	Zoology (Practical)
	Mathematics -I(Calculus)
	Mathematics –II (Differential Equations)
	Mathematics –(Project)
	Physics –I (Optics)
	Physics –II (Electromagnetism)
	Physics –III (Practical)
II	Learning and Teaching
	Computer application in Education
	Chemistry –I (Physico-inorganic Chemistry)
	Chemistry-II (Physico-organic Chemistry)
	Chemistry (Practical)
	Botany-I (Bryophyta and Pteridophyta)
	Botany –II(Gymnosperms and angiosperms)
	Botany (Practical)
	Zoology –I (Genetics and Evolution)
	Zoology –II (Developmental Biology)
	Zoology (Practical)
	Mathematics -I(Numerical Analysis)
	Mathematics –II (Discrete Mathematics)
	Mathematics –(Project)
	Physics –I (Electronic Devices and Circuits)
	Physics –II (Solid State Physics)
	Physics –III (Practical)

Semester	Course Title
III	General Hindi-I
	Knowledge and Curriculum
	Chemistry –I (Physico-inorganic Chemistry)
	Chemistry-II (Physico-organic Chemistry)
	Chemistry (Practical)
	Botany-I (Angiosperm Taxonomy and Economic Botany)
	Botany –II (Plant Morphology and Anatomy)
	Botany (Practical)
	Zoology –I (Structure and Function of Non Chordates)
	Zoology –II (Animal Physiology and Endocrinology)
	Zoology (Practical)
	Mathematics -I(Algebra of Matrices)
	Mathematics –II (Abstract Algebra)
	Mathematics –(Project)
	Physics –I (Mechanics, waves and oscillations)
	Physics –II (Theory of Relativity and Modern Physics)
	Physics –III (Practical)
IV	Essential language skill-II (English)
	Assessment for Learning
	Pedagogy subjects
	Chemistry –I (Physico-inorganic Chemistry)
	Chemistry-II (Physico-organic Chemistry)
	Chemistry (Practical)
	Botany-I (Plant Physiology(Part-I))
	Botany –II (Plant Physiology(Part-II))
	Botany (Practical)
	Zoology –I (Biochemistry and Immunology)
	Zoology –II (Structure and functions of chordate)
	Zoology (Practical)
	Mathematics -I(Real Analysis)
	Mathematics –II (Optimization Techniques)
	Mathematics –(Project)
	Physics –I (Thermodynamics and Statistical Physics)
	Physics –II (Elementary of Quantum Mechanics)
	Physics –III (Practical)

Semester	Course Title
IV	Environmental Education
	Contemporary India and Education
	Chemistry –I (Physico-inorganic Chemistry)
	Chemistry-II (Physico-organic Chemistry)
	Chemistry (Practical)
	Botany-I (Cell Biology and Immunology)
	Botany –II (Genetics and Plant Breeding)
	Botany (Practical)
	Zoology –I (Micro Biology and Bio Technology)
	Zoology –II (Applied Zoology and Ethnology)
	Zoology (Practical)
	Mathematics -I(Vector Calculus and Linear Algebra)
	Mathematics –II (Mechanics)
	Mathematics –(Project)
	Physics –I (Mathematical Physics)
	Physics –II (Atomic and Molecular Physics)
	Physics –III (Practical)
	Childhood and Growing Up
	General Hindi-II
VI	School Internship (Two Weeks)
	Chemistry –I (Physico-inorganic Chemistry)
	Chemistry-II (Physico-organic Chemistry)
	Chemistry (Practical)
	Botany-I (Molecular Biology and Biochemistry)
	Botany –II (Ecology and Applications of Biotechnology)
	Botany (Practical)
	Zoology –I (Ecology and Biostatistics)
	Zoology –II (Environmental Biology)
	Zoology (Practical)
	Mathematics -I(Mathematical Statistics)
	Mathematics –II (Laplace and Fourier Transformation)
	Mathematics –(Project)
	Physics –I (Nuclear and Particle Physics)
	Physics –II (Experimental Techniques)
	Physics –III (Practical)

Semester	Course Title
VII	Gender , School and Society
	Creating an Inclusive School
	Pedagogical Inputs
	School Internship (Two Weeks)
	Simulative teaching and Learning
	Mastery even sem teaching skills
	Innovative Lesson
	Cooperative learning
	Constructivism
	Problem solving
	project methods
	School Internship (Sixteen Weeks)
	Drama and Art in Education
VIII	Guidance and Counselling in Schools
	Peace and Value Education
	Indian Constitution and Human Rights
	Post Internship
	Criticism Lesson
	Final Practical



Master of Education (MED)

Master of Education is a master degree programme that deals with the study of new methods of teaching and educational research. The programme focuses on different aspects of education including instruction, curriculum, counselling, leadership, and educational technology.

Courses offered in Master of Education (MED)

Semester	Course Title
I	Psychology of learning and Development
	Historical , Political and Economy of Education
	Educational Studies
	Introduction to Educational Research
	Communication and Expository Writing
	Self - Development and Yoga
	ICT
II	Philosophical Foundation of Education
	Sociological Foundation of Education
	Curriculum Studies
	Pre-service and In-service Teacher Education
	Dissertation
	Internship in Teacher Training Institution (3 weeks)
III	Educational Planning and Management at Elementary /Secondary
	OR
	Issues Curriculum and Assessment at secondary level
	Advanced Educational Research
	Educational Technology and instructional process
	Perspectives , Research and Issues in Teacher Education
	Academic Writing
IV	Dissertation
	Pedagogy of Social Science Education at Elementary / Secondary Education
	Pedagogy of Language Education at Elementary / Secondary Education
	Educational Planning, Management and Finance at Elementary / Secondary Level
	Educational Administration of Elementary / Secondary Level
	Dissertation

M.Phil

This programme has a goal to sculpt the teachers with professional excellence as well as humane sensitivity.

Courses offered in M.Phil

Semester	Course Title
I	Foundation of Educational Research
	Elective Papers (Any One)
	1) Advance Educational Administration
	2) Advance Educational Psychology
	3) Educational Statistics And Statistical Inferences
II	Proposal For Dissertation And Review Of Research Studies
	Psycho-Social Basis Of Educational Research
	Dissertation



School of Social Sciences

The School of Social Sciences offers employment friendly programmes at Master's and Doctorate levels in Social Work.

The course contents are so designed to groom the aspirants as Adult Guidance Workers, Career Advisors and Community Development Counsellors.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
Master of Social Work	2 Years	Graduation (any stream) (with min. 48% marks)	ET + PI
M. Phil. (Social Work)	1 Year	MSW with min. 50% Marks	
Ph. D.	3 Years (Min.)	Post Graduation with 55% in Relevant Discipline	



Master of Social Work (MSW)

Master of Social Work (MSW) programme aims at social work education and building social work knowledge and practice through arrangement of ideological stances, research and field engagements.

Course offered in Master of Social Work (MSW)

Semester	Course Title
I	Personality and Dynamics of Human Behaviour
	Human Society and Culture
	Social Case Work: Theory and Practice
	Group Work: Theory and Practise
	Field work; Field-work Practicum & Viva-voce
	Social and Human Development
II	Population and Environment-
	Community Organization: Theory and Practice
	Social Work Research-
	Social Welfare Administration and Social Action
	Field-work Practicum & Viva- voce
	Social Work: Themes and Perspectives
III	Social Policy and Planning in India-
	Social Statistics and Computer Applications-
	Trade Unions and Industrial Relations
	Labour Welfare and Social Security
	Women and Society in India-
	Youth Welfare and Development
IV	Field-work Practicum & Viva- voce-
	Counselling and Communication
	Participatory Approaches to Development and Social Work Practice Skills
	Political Economy and Development-
	Human Resource Management
	Labour Legislations in India
	Child Welfare and Development-
	Welfare of the Aged
	Field-work Practicum
	Field-based Research Report Project Work/ Dissertation
	English

M. Phil. (Social Work)

The M.Phil Programme in Social Work is a research based programme which is meant to produce social work professionals in the most advanced and innovative social work research methods and equip to take up a careers in academics or research and pursue doctoral programmes in social work.

Course offered in M. Phil. (Social Work)

01	Theoretical Orientations In Sociology ;
02	Research Methodology-
Elective Papers:	
03	Social Labour Welfare
03	Rural and Urban Community Development -
M.PHIL. IIInd SEMESTER	
04	Dissertation
M.PHIL. (SOCIAL WORK) 1ST SEMESTER, THEORETICAL AND CONCEPTUAL ISSUES IN SOCIAL WORK	
01	Theoretical and Conceptual Issues in Social Work -
02	Social Work Research
Elective Papers:	
03	Social Work in Industry
04	Mental Health
05	Rural and Urban Community Development in India
M.PHIL. (SOCIAL WORK) 1Ind SEMESTER	
06	Dissertation

School of Media Studies

Media is referred to as the fourth pillar of democracy, the whistle blower and watchdog of the society. It plays a significant role in nation building.

The programmes of the School are designed to nurture media professionals through sustained and intensive practical and theoretical lessons. The School has qualified and experienced teachers to ensure all round development of the students. The school runs undergraduate (BJMC) and postgraduate (MJMC) programmes in Journalism and Mass Communication. Also it offers short term courses in Broadcast Journalism and Videography.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
BJMC	3 Years	10+2 (any stream) pass	Merit + PI
MJMC	2 Years	Graduation in Relevant Programme with min. 50%	
Diploma in Videography	1 Year	10+2 (any stream) pass	
Ph. D. Mass Communication & Journalism	3 Years (Min.)	Post Graduation with 55% in Relevant Discipline	ET + PI

Course offered in Bachelor of Journalism and Mass Communication (BJMC)

Semester	Course Title
I	Introduction to Communication
	Media Reporting
	Communicative English
	History of Press
	Introduction to Communication
II	Media Reporting
	Communicative English
	History of Press
	Theoretical Perspectives on Media
	Creative Writing- (Hindi & English)
	Radio Production
	TV Production
	Theoretical Perspectives on Media
	Creative Writing- (Hindi & English)
	Radio Production
	TV Production

Bachelor of Journalism and Mass Communication (BJMC)

The programme offers a wide range of opportunities in the field of mass media journalism, public relations and advertising. Journalists work in all types of media fields and industries.

Semester	Course Title
III	Communication Research and Methods
	Media Ethics & Laws
	Media & Politics
	Film Apperication
	Broadcast Journalism
IV	Basics of Editing
	Corporate Communication
	Elective I Option I Media Management
	Elective I Option II
	Broadcast Journalism
	Basics of Editing
	Corporate Communication
	Elective I Option I Media Management
	Elective I Option II
	Elective II Option I
	Development Communication
	Elective II Option II
	Media & Society
	Rural Journalism
V	Advertising and PR
	Understanding World History
	Elective II Option I
	Development Communication
	Elective II Option II
	Media & Society
	Rural Journalism
	Advertising and PR
	Understanding World History
	Environment Communication
VI	Women & Gender Studies
	Elective III Option I
	New Media
	Elective III Option II
	Cyber Journalism
	Project Work
	Environment Communication
	Women & Gender Studies
	Elective III Option I
	New Media
	Elective III Option II
	Cyber Journalism
	Project Work

Master of Journalism and Mass Communication (MJMC)

The aim of MJMC programme is to educate students in the fields of journalism, mass communication, media research, advertising and public relations.

Area of specialization- TV / Documentary Production, Newspaper : Layout and Design, Photography: Still & Video, TV news capsule production, Advertisement

Course offered in Master of Journalism and Mass Communication (MJMC)

Semester	Course Title
I	Theoretical Perspectives of Communication
	Information Technology and Web World
	History of Media in India
	Meaning and Making of News I
	Theoretical Perspectives of Communication
II	Information Technology and Web World
	History of Media in India
	Meaning and Making of News I
	Radio Production
	Development Communication
III	Media Ethics & Laws
	Meaning & Making of News II
	Radio Production
	Development Communication
	Media Ethics & Laws
IV	Meaning & Making of News II
	Media and Communication Research
	Event Management
	TV Production
	E1 Corporate Communication and Advertising
	Elective 1 Option I
	E2 PR and Advertising
	Elective 1 Option II
	Media and Communication Research
	Event Management
	TV Production
	Corporate Communication and Advertising
	PR and Advertising
	Reporting and Editing
	Educational Communication
	E I Specialized Media Reporting
	Elective 2 Option I
	E II Specialized Reporting And Current Issues
	Elective 2 Option II
	Specializations
	Reporting and Editing
	Educational Communication
	E I Specialized Media Reporting
	E II Specialized Reporting And Current Issues
	Specializations

Diploma in Videography

Videography is much more than mere learning to operate video cameras. This programme is designed to learn basic camcorder videography and non-linear video editing techniques.

Course offered in Diploma in Videography

Semester	Course Title
I	Basics of Camera
	Functions and control of Video Camera
	Film Appreciation
	Indoor- Outdoor Production
	Basics of Camera
II	Functions and control of Video Camera
	Film Appreciation
	Indoor- Outdoor Production
	Television and production Techniques
	Lighting and Camera Techniques
	Basics of Editing & Techniques
	Capturing & Video editing Basic
	Television and production Techniques
	Lighting and Camera Techniques
	Basics of Editing & Techniques
	Capturing & Video editing Basic



School of Languages, Literature & Society

The School offers Undergraduate, Post graduate & Research Programmes in English. The objectives of these programmes is to familiarize the students with the literary works of well known writers from Anglo;- Saxon period to present times.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.A. (Hons.) English	3 Years	10+2 (any stream) with min. 50% marks	Merit + PI
M.A. English	2 Years	Graduation in English with min. 50% marks	Merit + PI
M. Phil.	1 Year	Graduation in English with min. 55% marks	Merit + PI
Ph. D.	3 Years (Min.)	Graduation in English with min. 55% marks	ET+ PI



B.A. (Hons.) English (BAENG)

This program will develop students language skills to enable them to communicate in professional contexts. At the end of the program, students will have adequate level of linguistic and cultural competence and will be prepared for the professional world.

Course offered in B.A. (Hons.) English (BAENG)

Semester	Course Title
I	Modern English Usages & Language-I
	History of English Literature
	Introduction to English Literature -I
	Introduction to English Literature-II
	Introduction to Sociology-I
	French : Compulsory Language (other than English)
II	English Usage, Literary Forms and Devices
	Elizabethan Age and Metaphysicals
	17th and 18th Century Literature
	Pre-Romantic and Romantic Literature
	Elective II Introduction to Sociology II
	Compulsory Language French
III	Phonetics and Phonology
	Nineteenth Century Poetry & Drama
	Nineteenth Century Prose & Fiction
	Twentieth Century Poetry and Drama
	Introduction to Sociology-III
	French: Compulsory Language
IV	20th Century Prose & Fiction
	Modern English Usage & Language-II
	Indian Writing in English-I
	Indian Writing in English-II
	Elective : Introduction to Sociology-IV
	Compulsory Language French
V	American Literature
	New Literatures
	Major Philosophical Trends
	World Classics in Translation
	Environmental Studies
	Indian and Western Poetics
VI	Regional Literature in Translation
	Critical Theories
	Introduction to Language and Linguistics
	Dissertation

M.A. English (MAENG)

This programme will provide opportunities for a career in multiple industries including publishing house, advertising marketing, education and media.

Course offered in M.A. English (MAENG)

Semester		Course Title
I		Modern English Usages and Grammar
		Chaucer to Elizabethans
		Metaphysicals to Milton
		Augustans & Neo Classical Writers
II		Pre-Romantics and Romantics
		Phonetics and Spoken English
		Literary Criticism - I
		Victorian Literature
III		Linguistics & Applied Linguistics
		American Literature
		World Literature
		Modern British Literature
IV		Stylistics , Discourse Analysis & Pragmatics
		Indian English Literature
		Modern British Literature -II
		Critical Theory - II
		Dissertation

M.Phil. (M. Phil.)

This program aims to help the students to develop ability to organise ideas and present them coherently with a considerable degree of sophistication in keeping with the norms of scholarly research and writing.

Course offered in M.Phil. (M. Phil.)

Year		Course Title
I		Critical approaches to Language and Literature
		Application of Literary Theories
		Dissertation



School of Agriculture Sciences

The school provides an exemplary education that balances the expectations of the industry and academic input.

The goal of this programme is to inculcate scientific methods and equipment to bring about positive changes in existing agricultural techniques. The course will include land surveying, animal management, biotechnology, soil sciences, and water resource management.

Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B. Sc. (Hons.) Agriculture	4 Years	10+2 Science/Agriculture and JET Appeared	Merit + PI

B. Sc. (Hons.) Agriculture (BAG)

While pursuing this programme students will study Agriculture (Agronomy), Veterinary Science, Forestry, Fisheries, Horticulture, Home Science, and more. After completing this programme students will be eligible to work in the agricultural field and drive real change in the arena.



Course offered in B. Sc. (Hons.) Agriculture (BAG)

Semester	Course Title
I	Fundamentals of Horticulture
	Fundamentals of Genetics
	Fundamentals of Soil Science
	Agricultural Microbiology
	Comprehension & Communication Skills in English
	Fundamentals of Agronomy
	Introductory Biology*/Elementary Mathematics*
	Agricultural Heritage*
	Rural Sociology & Educational Psychology
	Human Values & Ethics (non credit)
	NSS/NCC/Physical Education & Yoga Practices**
II	Fundamentals of Plant Biochemistry and Biotechnology
	Introduction to Forestry
	Soil and Water Conservation Engineering
	Fundamentals of Crop Physiology
	Fundamentals of Agricultural Economics
	Fundamentals of Plant Pathology
	Fundamentals of Entomology
	Fundamentals of Agricultural Extension Education
	Communication Skills and Personality Development
	Crop Production Technology – I (<i>Kharif Crops</i>)
	Fundamentals of Plant Breeding
III	Agricultural Finance and Cooperation
	Agri- Informatics
	Farm Machinery and Power
	Production Technology for Vegetables and Spices
	Environmental Studies and Disaster Management
	Statistical Methods
	Livestock and Poultry Management
	Crop Production Technology – I (<i>Kharif Crops</i>)
	Production Technology for Ornamental Crops, MAP and Landscaping
	Renewable Energy and Green Technology
	Problematic Soils and their Management
IV	Production Technology for Fruit and Plantation Crops
	Principles of Seed Technology
	Farming System & Sustainable Agriculture
	Agricultural Marketing Trade & Prices
	Introductory Agro-meteorology & Climate Change
	Elective Course

Semester	Course Title
V	Principles of Integrated Pest and Disease Management
	Manures, Fertilizers and Soil Fertility Management
	Pests of Crops and Stored Grain and their Management
	Diseases of Field and Horticultural Crops and their Management -I
	Crop Improvement-I (<i>Kharif Crops</i>)
	Entrepreneurship Development and Business Communication
	Geoinformatics and Nano-technology and Precision Farming
	Practical Crop Production – I (<i>Kharif crops</i>)
	Intellectual Property Rights
	Elective Course
VI	Rainfed Agriculture & Watershed Management
	Protected Cultivation and Secondary Agriculture
	Diseases of Field and Horticultural Crops and their Management-II
	Post-harvest Management and Value Addition of Fruits and Vegetables
	Management of Beneficial Insects
	Crop Improvement-II (<i>Rabi crops</i>)
	Practical Crop Production –II (<i>Rabi crops</i>)
	Principles of Organic Farming
	Farm Management, Production & Resource Economics
	Principles of Food Science and Nutrition
VII	Elective Course
	General orientation & On campus training by different faculties
	Village attachment
	Unit attachment in Univ./ College. KVK/ Research Station
	Attachment
	Plant clinic
	Agro-Industrial Attachment
	Project Report Preparation, Presentation and Evaluation
	General orientation & On campus training by different faculties
	Village attachment
VIII	Unit attachment in Univ./ College. KVK/ Research Station
	Attachment
	Production Technology for Bioagents and Biofertilizer
	Seed Production and Technology
	Mushroom Cultivation Technology
	Soil, Plant, Water and Seed Testing
	Commercial Beekeeping
	Poultry Production Technology
	Commercial Horticulture
	Floriculture and Landscaping
	Food Processing
	Agriculture Waste Management
	Organic Production Technology
	Commercial Sericulture



Courses offered in B. Sc. Nursing (BN) Programme

Years	Course Title
I	Anatomy and Physiology
	Nutrition and Biochemistry
	Nursing Foundation
	Psychology
	Microbiology
	English
	Hindi
	Introduction to Computer
	Nursing Foundation (Pr.)
	Sociology
II	Medical Surgical Nursing – I
	Pharmacology, Pathology and Genetics
	Community Health Nursing- I
	Communication and Education Technology
	Medical Surgical Nursing – I (Pr.)
III	Medical Surgical Nursing-II
	Child Health Nursing
	Mental Health Nursing
	Nursing Research and Statistics
	Medical Surgical Nursing-II (Pr.)
	Child Health Nursing (Pr.)
IV	Mental Health Nursing (Pr.)
	Midwifery and Obstetrical Nursing
	Community Health Nursing- II
	Management of Nursing Services and Education
	Environmental Sciences
	Midwifery and Obstetrical Nursing (Pr.)
	Community Health Nursing- II (Pr.)

Seedling School of Nursing

Nursing, a blend of art and science a profession focused on the autonomous and collaborative care of mankind. It needs to be geared up to meet the growing healthcare needs of the people in the changing environment of advancing technology and rapid scientific progress. Bachelor of Nursing program gives an opportunity to develop the knowledge, skills and ethical behaviour that enables oneself to practice as a competent nurse, clinician and for other health care services. Students after graduation can be absorbed in the healthcare sector to provide person specific medical care.



Academics

Provide training to nurses to provide expert health care at homes and hospitals.

Provide opportunities for personality development and inculcate a sense of responsibility and integration of health and social aspects. Develop leadership qualities in an individual to be a part of the workforce for managing hospitals.

Affiliations and Collaborations

School of Nursing of 'Jaipur National University' is recognized by the Government of Rajasthan and functions as per the norms prescribed by Indian Nursing Council. The school has collaboration with speciality hospitals like Fortis, Escorts Hospital and Apex Hospital Jaipur for training its students. The annual intake of students in the school is forty.

Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.Sc. Nursing	4 Years	Min. 50% in 10+2 with Physics/Chemistry/Biology & English	Entrance Test + Interview

B.Sc. Nursing (BN)

B.Sc. Nursing, Offered by School of Nursing, is a four-year professional programme. This programme is registered with and controlled by Indian Nursing Council.

School of Fashion Design

The fashion designer is the inspiration for creative ideas and new trends for clothing, fabric development and accessories. The degree in Fashion Design provides the technical and professional knowledge and capabilities to work as a fashion designer and fashion product developer for the global fashion industry.



Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
Bachelor of Design - Fashion Design	4 Years	10+2 pass	Merit and PI
Diploma in Fashion Design	1 Year	10+2 pass	Merit and PI
MBA Fashion Design	2 Years	Graduation in the relevant field	ET + PI

Bachelor of Design - Fashion Design (B. Des. FD)

The program will equip the students with the skills necessary to create fashion from the initial vision, through hand sketching of the design, to draping pattern creation, sewing and execution of the finished product. The curriculum is designed to develop skills so as to respond to changing needs of the fashion industry. Each student is required to prepare a portfolio and selected collection of work will be showcased to people from industry and academia at a graduate runway.

Courses offered in Bachelor of Design - Fashion Design (B. Des. FD) Programme

Semester	Course Title
I	Fashion Studies
	Sustainable Design (Environmental Studies)
	Communication Skills
	Basic Of fashion Design
	Visualization & Representation-I
	Material Exploration-I
	Computer Application
II	Textile Science
	Western Art Appreciation
	Visualization & Representation-II
	Material Exploration-II
	Digital Design-I
	Basic Sewing Techniques
	History of Western Costume
III	Draping-I
	Fashion Illustration-I
	Pattern Making-I
	Garment Construction-I
	Basics of Embroideries and manipulation
	Business of fashion
	Draping-II
IV	Design Process-I
	Fashion Illustration-II
	Pattern Making-II
	Garment Construction-II
	Digital Design-II

Semester	Course Title
V	Indian art and Costume appreciation
	Research Method
	Merchandising Production Methods
	Surface Ornamentation-I
	Fashion Illustration-III
	Pattern Making & garment construction-III
	Draping-III
VI	Professional Practices
	Fashion Forecasting
	Surface Ornamentation-II
	Fashion Illustration-IV
	Pattern Making & garment construction-IV
	Design Process-II
	Visual Merchandising
VII	Elective-I (Any one)
	1.Business of Luxury Fashion
	2.Couture Design
	3.Fashion Advertisement
	Portfolio Development - I
	Fashion Accessories
	Visual Merchandising
VIII	Elective -II (Any One)
	1. Fashion Photography
	2. Fashion Styling

Courses offered in Diploma in Design Programme

Semester		Course Title
I		Basic of Fashion
		COMMUNICATION SKILL
		Computer Application
		Fashion Illustration
		Pattern Making & Construction-I
		Basic of Design
		Surface ornamentation
II		Merchandising production Methods
		Theory of Textile
		Draping
		Fashion Illustration -II
		Digital Design
		Pattern Making & Construction-II
		Material exploration



MBA Fashion Design (MBA-FM)

It is a specialised program of business administration for fashion management

Semester		Course Title
I		Business Communication
		Business Environment
		Principles And Practices Of Management
		Organizational Behavior
		Introduction Of Global Fashion Industry
		Fabric Knowledge
		Computer Application In Fashion Management
II		Research Methodology
		Management Accounting I
		Marketing Management
		Operation And Production Management
		Human Resource Management
		Study Of Garment Manufacturing
		Design Process And Design Thinking
III		Strategic Management
		Management Accounting I
		Customer Relationship Management
		Fashion Forecasting
		Product Development
		Merchandising And Production Methods
		Summer Internship Project
IV		Entrepreneurship And Development
		Visual Merchandising
		Project Management
		Retail Management
		Advertising And Branding
	Summer Internship Project	

Bachelor of Physiotherapy (BPT)

At the undergraduate level, the School of Allied Health Sciences offers a degree programme in Bachelor of Physiotherapy (BPT). It is one of the best Physiotherapy colleges in Jaipur, having state of art infrastructure.

Course offered in Bachelor of Physiotherapy (BPT)

Semester	Course Title
I	Human Anatomy-I
	Human Anatomy-I
	Human Physiology-I
	Human Physiology-I
	Fundamentals of Biomechanics & Exercise Therapy (BOP-I)
	Fundamentals of Biomechanics & Exercise Therapy (BOP-I)
II	Fundamentals of Biomedical Physics (BOP-II)
	Fundamentals of Biomedical Physics (BOP-II)
	Biochemistry
	Human Anatomy-II
	Human Anatomy-II
	Human Physiology-II
III	Exercise Therapy-I
	Exercise Therapy-I
	Electrotherapy-I
	Electrotherapy-I
	Sociology & Psychology
	Pharmacology
IV	Pathology & Microbiology
	Exercise Therapy-II
	Exercise Therapy-II
	Electrotherapy-II
	Electrotherapy-II
	Basics of First Aid & Critical Care
V	Basics of First Aid & Critical Care
	General Medicine
	General Surgery
	Community Medicine
	Biomechanics & Kinesiology-I
	Biomechanics & Kinesiology-I
VI	Ethics & Administration
	Clinical Orthopedics
	Clinical Neurology & Psychiatry
	Clinical Cardiorespiratory Conditions
	Biomechanics & Kinesiology-II
	Biomechanics & Kinesiology-II
VII	Community Based Rehabilitation
	Clinical Obstetrics, Gynaecology & Pediatrics
	Physiotherapy in Surgery & Hand
	Physiotherapy in Surgery & Hand
	Bioengineering
	Physiotherapy in Medicine & Geriatric Conditions
VIII	Physiotherapy in Medicine & Geriatric Conditions
	Physiotherapy in Sports Fitness & Allied Therapeutics
	Physiotherapy in Sports Fitness & Allied Therapeutics
	Physiotherapy in Orthopedic Conditions-I
	Physiotherapy in Neurological Conditions-I
	Physiotherapy in Neurological Conditions-I
	Physiotherapy in Obstetrics, Gynecology & Pediatrics
	Advanced Physical & Functional Diagnosis
	Biostatistics & Research Methodology
	Physiotherapy in Orthopedic Conditions-II
	Physiotherapy in Orthopedic Conditions-II
	Physiotherapy in Neurological Conditions-II
	Physiotherapy in Neurological Conditions-II
	Physiotherapy in Cardiorespiratory Conditions
	Physiotherapy in Cardiorespiratory Conditions
	Edective Approaches in Physiotherapy Conditions



Master of Physiotherapy (MPT)

MPT provides specialisation in (Neurology & Psychosomatic Disorders, Ortho & Sports, Ortho & Manual therapy)

Semester	Course Title
I	Basic Medical Sciences
	Research Methodology & Biostatics
	Basics of Exercise Physiology & Nutrition
	Electrotherapeutics & Electrophysiology
	Seminar and Clinical Topics
II	Biomechanics & kinesiology-i
	Ethics, principles, management & educational methodology in physiotherapy
	Physical & functional diagnosis
	Seminar on clinical topics
	Biomechanics & kinesiology-ii (theory)
III	Rehabilitation in physiotherapy conditions (orthopedics & sports)-i (orthopedics & manual therapy) -i (neurology&psychosomatic disorders) -i- theory
	Rehabilitation in physiotherapy conditions (orthopedics & sports)-i (orthopedics & manual therapy) -i (neurology & psychosomatic disorders) -i- practical
	Rehabilitation in physiotherapy conditions (orthopedics & sports)-ii (orthopedics & manual therapy) -ii (neurology & psychosomatic disorders) -ii- theory
	Rehabilitation in physiotherapy conditions (orthopedics & sports)-ii (orthopedics & manual therapy) -ii (neurology & psychosomatic disorders) -ii- practical
	Dissertation on a research topic
IV	Clinical Posting

School of Allied Health Sciences

The allied health field provides numerous opportunities to our graduates to fill up niche areas of medical services that are always in high demand. Our graduates learn to help prevent, diagnose, and treat various ailments and make a positive difference in the lives of their patients through care, compassion, and meaningful intervention. These healthcare professionals support physicians by taking care of patients at various hospitals, community settings, laboratories, and research institutions.

PROGRAMME STRUCTURE			
PROGRAMME	DURATION	ELIGIBILITY	SELECTION CRITERIA
BPT	4 Years	Min.50% In 10+2 With PCB	ET+PI
MPT	2 Years	BPT With Min 50%	ET+PI
B.Sc. Clinical Dietetics	3 Years	Min.50% In 10+2 With PCB	ET+PI
B.Sc. MLT (Including 1 Year Hospital Training)	4 Years	Min.50% In 10+2 With PCB	ET+PI
M.Sc. Medical Science (Anatomy/ Microbiology)	3 Years	B.Sc. PCB/ MBBS/ BDS/ BAMS/ BHMS/ BPT/B.Pharm./B.Sc. Nursing/BVSc & AH	Merit + PI

B. Sc. Clinical Dietetics (BCD)

Semester	Course Title
I	Computers Fundamentals
	Fundamentals of Biochemistry
	General Microbiology
	Basic Nutrition
	Basic Dietetics
	Professional communication skills*
	General Microbiology Lab
	Fundamentals of Biochemistry Lab
	Computer Fundamentals Lab
	Clinical Nutrition
II	Vitamin and Mineral Nutrients
	Basic Molecular Biology
	Family Meal Management
	Human Anatomy and Physiology I
	Human Anatomy & Physiology II
	Basic Nutrition Lab
	Basic Molecular Biology Lab
	Human Anatomy and Physiology Lab
III	Therapeutic Nutrition
	Nutritional Biochemistry
	Community Nutrition
	Food Commodities I
	Human Anatomy and Physiology III
	Therapeutic Nutrition Lab
	Community Nutrition Lab
	Human Physiology II Lab
	Nutritional Biochemistry Lab
	Food Microbiology, Sanitation and Hygiene
IV	Food Commodities II
	Food Preservation
	Preventive Nutrition
	Human Anatomy & Physiology IV
	Food Microbiology Lab
	Food Commodities Lab
	Food preservation Lab
	Human Physiology Lab- III
	Food Fortification
	Food Toxicology and safety
V	Food Adulteration
	Food Service Management
	Research Methodology and Statistics
	Food Analysis Lab
	Food service management Lab
	Food Science Lab (Food adulteration + Food Safety)
	Environmental studies*
VI	Nutrition in Special Conditions
	6 month project & On The Job Training

B. Sc. Medical Lab Technology (BMLT)

Semester	Course Title
I	Computer Fundamentals
	Basic Biochemistry-I
	General Microbiology
	Basic Pathology-I
	Human Anatomy & Physiology-I
	*Professional Communication Skills
	General Microbiology Lab.
	Basic Biochemistry-I Lab.
	Computer Fundamentals Lab.
	Basic pathology-I Lab.
II	Human Anatomy & physiology-I lab
	Basic Pathology-II
	Basic Biochemistry-II
	Microbial Techniques
	Human Anatomy & Physiology-II
	Practical 1 (BMLT-201)
	Practical 2 (BMLT-202)
	Practical 3 (BMLT-203)
	Practical 4 (BMLT-204)
	Clinical Hematology
III	Metabolic & Blood Biochemistry
	Bacterial Pathogens & Associated Diseases
	Immunology
	Preventive Medicine & Health Care
	Practical 1 (BMLT-301)
	Practical 2 (BMLT-302)
	Practical 3 (BMLT-303 & BMLT-304)
	Histopathological Techniques
	Biochemical & Biophysical Techniques
	Pathogenic Viruses
IV	Clinical Pathology
	Practical 1 (BMLT-401)
	Practical 2 (BMLT-402)
	Practical 3 (BMLT-403)
	Practical 4 (BMLT-404)
	Blood Banking & Transfusion Medicine
	Diagnostic Enzymes & Vitamins
	Clinical Mycology
	Biostatistics
	Practical 1 (BMLT-501)
V	Practical 2 (BMLT-502)
	Practical 3 (BMLT-503)

Semester		Course Title
VI		Histo & Cytopathological Techniques
		Hormones & Disorders
		Clinical Parasitology
		Research Methodology
		*Environmental Studies and Disaster Management
		Practical 1 (BMLT-601)
		Practical 2 (BMLT-602)
		Practical 3 (BMLT-603)
		Clinical visit
VII		Immunopathology
		Advance Biochemical Techniques
		Advance Microbial Techniques
		Entrepreneurship & Quality Laboratory Management
		Medical Jurisprudence
		Practical 1 (BMLT-701)
		Practical 2 (BMLT-702)
		Practical 3 (BMLT-703)
VIII		Six Month's Training with An Analytical Project)

M.Sc. Medical Anatomy (MANM)

M. Sc Medical Anatomy is a 2-year post graduate degree program, the minimum eligibility is a B.Sc. Anatomy or any related discipline from a recognized institute or its equivalent exam.

Course offered in M.Sc. Medical Anatomy (MANM)

Semester		Course Title
I		Basics of Anatomy
		Basics of Physiology
		Basics of Biochemistry
		General Anatomy, Gross Anatomy with Applied aspects
		General & Systemic-Embryology including growth, development and Teratology, General & Systemic-Histology, Comparative Anatomy and Anthropology.
		Neuroanatomy, Histological, museum and embalming techniques including medico legal aspects, Human Genetics.

M.Sc. Medical Microbiology (MMBM)

The course offered at one of the best MSc Medical Microbiology colleges in Jaipur aims to provide knowledge of medical microbiology that includes microorganisms, diagnosis, disease causation and treatment of pathogens to advanced practical training and major significance to public health.

Course offered in M.Sc. Medical Microbiology (MMBM)

Semester		Course Title
II		Basics of Anatomy
		Basics of Physiology
		Basics of Biochemistry
		General microbiology and Immunology.
		Systemic Bacteriology and Parasitology.
		Mycology and Virology

DMLT (as per State Govt.)

Year/Semester		Course Name
I Year		Communication Skills in English
		Computer Application
		Anatomy and Physiology
		Hematology and Blood Banking
		Clinical Pathology
		Clinical Practical Training
		MLT Instruments Practice Lab-1
		Hospital Industrial Training
II Year		Entrepreneurship and Professional Management
		Environmental Studies
		Microbiology including Parasitology and Immunology
		Pathology
		Biochemistry
		Clinical Practical Training-II
		MLT Instruments Practice Lab-II
	Hospital Industrial Training	

Institute of Medical Sciences and Research Centre

Upcoming Medical College and 1000 Beds Hospital at Jagatpura, Jaipur. Jaipur National University has made niche for itself in the Country because of its commitment to providing quality education and conducive learning environment. Always sighting into new possibilities and raising its aspirations, the University is venturing into the field of Medical Education and Research. Here the University aspire to set a benchmark not only for medical education but also for treatment of patients by its state of the art 1000 bedded Multi-speciality Hospital.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
Bachelor of Medicine & Bachelor of Surgery	4.5 Years	As per MCI Norms	Through MCI - ET & Counselling



AN	Anatomy
PY	Physiology
BI	Biochemistry
PH	Pharmacology
PA	Pathology
MI	Microbiology
FM	Forensic Medicine
CM	Community Medicine
IM	General Medicine
CT	Respiratory Medicine
PE	Pediatrics
PS	Psychiatry
DR	Dermatology, Venerology, Leprosy
SU	General Surgery
OP	Ophthalmology
EN	ENT,
OG	Obstetrics & Gynaecology
OR	Orthopedics
AS	Anaesthesia
RD	Radiodiagnosis
RT	Radiotherapy
DE	Dentistry
BI	Biochemistry

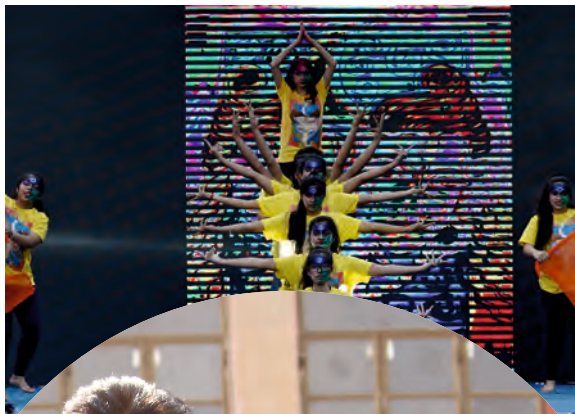
Academic Calendar 2018 – 2019

I/III/V/VII Semester Academic Calendar (Odd Semester July – December 2018)

S.No.	Events	I Sem	III Sem	V Sem	VII Sem
1.	Commencement of Classes	03 Aug 2018 (Friday) Induction Day	05 July 2018 Thursday	14 July, 2018 Saturday	
2.	Mid Term Test -I	10 – 13 September 2018 (Monday – Thursday)			
3.	Technorozz - 2018	28 , 29 &30 Sept 2018(30 th Sept. Sunday working , 1 st Oct . Monday as holiday)			
4.	Mid Term Practical	01 – 02 Nov.2018 (Thursday - Friday) 12 – 15 Nov. 2018 (Monday –Thursday)			
5.	Mid Term Test -II	19 – 22 Nov. 2018 (Monday – Thursday)			
6.	Preparation Leave	24-30 Nov. 2018 (Saturday - Friday)			
7.	End Sem Theory Examinations	01 – 17 December 2018 (Saturday - Friday)			
8.	End Sem Practical Exam	19 – 22 Dec.2018 (Wednesday – Saturday) 03 – 04 Jan. 2018 (Thursday – Friday)			
9.	Winter Semester Break	23 December2018-02 January2019 (Sunday - Wednesday)			

II/IV/VI/VIII Semester Academic Calendar (Even Semester Jan – May 2019)

S.No	Events	II Sem	IVSem	VI Sem	VIII Sem
1.	Commencement of Classes	05 January 2019(Saturday)			
2.	Convocation	23 February 2019			
3.	Mid Term Test -I	25 – 28 Feb 2019 (Monday – Thursday)			
4.	Mid Term Practical	04 - 09 March 2019(Wednesday-Tuesday)			
5.	Mid Term Test -II	03-06 April 2017 (Monday-Saturday)			
6.	End Sem Practical Exam	29April 2019 - 04 May 2019 (Monday-Saturday)			
7.	Preparation Leave	05 -10 May 2019 (Sunday - Friday)			
8.	End Sem Theory Examinations	11-29 May 2019(Saturday - Wednesday)			





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